REPORT RESUMES

ED 017 591 UD 005 194

RETARDATION IN INTELLECTUAL DEVELOPMENT OF LOWER-CLASS PUERTO RICAN CHILDREN IN NEW YORK CITY. INTERIM FINAL REPORT.

BY- THOMAS, ALEXANDER
NEW YORK UNIV., N.Y., MEDICAL CENTER

PUB DATE 1 DEC 67
GRANT OEG-5-0359-4111-3
EDRS PRICE MF-$0.50 HC-$3.04 74P.

DESCRIPTORS- *INTELLECTUAL DEVELOPMENT, *LOWER CLASS STUDENTS, *PUERTO RICANS, *ENVIRONMENTAL INFLUENCES, EDUCATIONAL RESEARCH, *ACADEMIC ACHIEVEMENT, EDUCATIONAL RETARDATION, URBAN YOUTH, SIBLINGS, LEARNING PROCESSES, PARENT ATTITUDES, CHILD REARING, MIDDLE CLASS NORMS, LANGUAGE DEVELOPMENT, BILINGUALISM, INTELLIGENCE TESTS, PRESCHOOL CHILDREN, BEHAVIOR PATTERNS, NEW YORK CITY

THIS STUDY ATTEMPTED TO DETERMINE THE ENVIRONMENTAL PATTERNS (CHILD CARE PRACTICES, PARENTAL ATTITUDES, AND OTHER INTRAFAMILY AND EXTRAFAMILY INFLUENCES) WHICH ARE DETRIMENTAL OR BENEFICIAL TO THE OPTIMAL LEARNING AND INTELLECTUAL DEVELOPMENT OF LOWER CLASS PUERTO RICAN CHILDREN. A SAMPLE POPULATION CONSISTED OF 95 CHILDREN WHOSE BEHAVIOR HAD BEEN FOLLOWED SINCE EARLY INFANCY AND THEIR OLDER SCHOOL-AGE SIBLINGS. A GROUP OF 136 MIDDLE CLASS CHILDREN WAS CHOSEN FOR COMPARATIVE ANALYSIS OF CERTAIN ITEMS. AN INTERIM ANALYSIS OF THE FINDINGS SHOWS THAT (1) I.Q. TEST RESULTS VARIED ACCORDING TO THE TESTER AND WERE UNCONNECTED WITH ANY LANGUAGE BARRIER, (2) THESE SCORES DID NOT DECREASE WITH CHRONOLOGICAL AGE, (3) THE OVERALL ACADEMIC ACHIEVEMENT OF THE SAMPLE WAS BELOW NORMAL, (4) THE EXPERIMENTAL GROUP WAS LESS ORIENTED TOWARD TASK COMPLETION THAN THE MIDDLE CLASS GROUP, AND (5) THE LANGUAGE DEVELOPMENT OF THE SAMPLE GROUP WAS NOT RETARDED BY BILINGUALISM. DATA ON CHILD CARE PRACTICES, HOME ENVIRONMENT, AND FAMILY CHARACTERISTICS ARE NOW BEING COLLECTED. FROM THESE PRELIMINARY FINDINGS IT APPEARS THAT ACADEMIC RETARDATION IS NOT THE RESULT OF COGNITIVE DEFECTS RESULTING FROM PRESUMED DEFICIENCIES IN THE HOME ENVIRONMENT OF THE PRESCHOOL CHILD, AND THAT RETARDATION MAY STEM FROM POOR SCHOOLING AND AN OVER-EMPHASIS ON TASK-ORIENTED TEACHING METHODS. HOWEVER, AS THE ANALYSIS OF HOME ENVIRONMENT FACTORS HAS NOT YET BEEN COMPLETED, IT IS ALSO POSSIBLE THAT SOME OF THESE FACTORS MAY ACCOUNT FOR THE CHILD'S ACADEMIC RETARDATION. (DK)

ED017591

UD005194

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

E-1

05194

INTERIM FINAL REPORT

Grant No. Old 32-42-8145-5021 Proposal No. 2131
New 5-0359-4411-3

Title: Retardation in Intellectual Development of Lower-Class Puerto Rican Children in New York City

Author: Alexander Thomas, M.D.
Professor of Psychiatry, New York University Medical Center
New York, N.Y. 10016

Date Submitted: December 1, 1967

The research reported herein was performed pursuant to a grant from the Office of Education, U.S. Department of Health, Education and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgement in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent Office of Education position or policy.

Bureau for the Education of the Handicapped
Division of Research
Research Laboratories and Demonstration Branch

TABLE OF CONTENTS

ACKNOWLEDGEMENTS Page iii

I. SUMMARY Page 1

II. INTRODUCTION Page 6

III. METHODS AND ANALYSES Page 10
  A. Sample Page 10
  B. Academic Achievement and School Functioning Page 13
  C. Intellectual and Perceptual Testing Page 15
  D. The Home Environment Parental Interviews Page 19
  E. Family Functioning and Home Environment Page 24
  F. Family Background and Characteristics Page 27

IV. RESULTS AND FINDINGS Page 31
  A. Intellectual Functioning at Different Age Levels Page 31
  B. Academic Achievement Page 36
  C. Cognitive Style As It Relates to Task-Performance Orientation Versus Person-Relatedness Page 36
  D. Bilingualism Page 41

V. CONCLUSIONS Page 42a

APPENDIX A Page 43

APPENDIX B Page 56

BIBLIOGRAPHY Page 68

ACKNOWLEDGEMENTS

In addition to the professional personnel actively engaged either as staff members or consultants, appreciation is due the Information Retrieval Center on the Disadvantaged, Ferkauf Graduate School of Humanities and Social Sciences of Yeshiva University. This facility was consulted frequently for bibliographical material related to the project.

Special appreciation is due Dr. Joseph O. Loretan, Deputy Superintendent, New York City Board of Education and Dr. Samuel D. McClelland, Acting Director, Bureau of Educational Research, New York City Board of Education, who, through their cooperation and interest in the project made possible the collection of the Puerto Rican children's school records from the public schools. The same courtesy and cooperation were also extended by the District Superintendents, principals, and individual teachers in the schools in which the Puerto Rican children were enrolled. Assistance in all procedures relating to securing the children's school records and to filling out of questionnaires by the teachers was given expenditiously and graciously.

The same high level of interest and cooperation was found in the parochial schools. The Right Reverend Monsignor Raymond T. Rigney, Superintendent of Schools, Archdiocese of New York and individual principals and teachers assisted generously in expediting our data gathering procedures related to the children's records of academic achievement.

Special acknowledgement for their generous giving of time and thought to many aspects of the research is due the consultants to the project: Herbert G. Birch, M.D., Ph.d., Research Professor of Pediatrics, Albert Einstein College of Medicine and Research Consultant to Association for Aid to Crippled Children; Jane B. Raph, Ed.D., Professor of Educational Psychology, Rutgers, University; Edmund W. Gordon, Ed.D., Professor and Chairman of the Department of Educational Psychology and Guidance, Graduate School of Education, Yeshiva University; Dr. Jacob Cohen, Professor of Psychology, New York University; and Dr. Elizabeth Hagan, Professor of Educational Measurement, Teachers College, Columbia University. Informal Consultations were held at various times with Dr. Kenneth B. Clark, Professor of Psychology, City University of New York, City College; Francisco Trilla, M.D., Chairman, Board of Directors, Puerto Rican Forum; Jose Montserrat, Director of the Division of Immigration, Commonwealth of Puerto Rico; Dr. Estelle Fuchs, Associate Professor of Education, City University of New York, Hunter College; and Dr. Lawrence Plotkin, Professor of Psychology, City University of New York, City College. Special appreciation is due Dr. Margaret Hertzig, instructor - psychiatry at New York University Medical Center, who gave freely of her time throughout the project as a consultant to the staff for a number of substantive questions and problems of research design and data analysis.

While all the staff members were particularly conscientious and helpful, Mrs. Olga A. Mendez, M.A., associated with the project from the very beginning was largely responsible for the collection and the high level of sample maintenance; for the cooperativeness of the Puerto Rican families, and for the extensive amount of information obtained from them.

While the contributions of these various individuals have been very helpful to us, they bear no responsibility for any of the conclusions in this report.

I Summary

1. This study has had the following objectives: 1) To identify the experientially determined patterns of behavioral and intellectual functioning of a population of lower-class Puerto Rican children in New York which appear detrimental to optimal learning and intellectual development: 2) To identify the specific child-care practices, parental attitudes and other intrafamilial and extrafamilial influences which produce such detrimental patterns in the children; and 3) To identify the favorable factors in the environment of these disadvantaged children which can be utilized in programs to prevent or remedy experientially produced mental retardation.

Sample

In the identification of these three factors related to intellectual retardation, the study utilized two groups of Puerto Rican children from 72 working class Puerto Rican families living largely in East Harlem, drawn consecutively from new infants registered in two of the municipal baby health stations. The first group consists of 95 children whose behavioral development was followed longitudinally from early infancy. The second group consists of 155 of the older school-age siblings of the subjects in the longitudinal study. Investigation of the level of intellectual and academic achievement of these children and of the intrafamilial and extrafamilial influences acting upon them has utilized both groups of children at different points in their development.

For comparative analysis there is available a population of advantaged middle class children of native-born parents who have been followed in a longitudinal study of behavioral development since 1956. There are 136 children and 84 families in this group.

Each area of investigation can be summarized in turn, including data collection and analysis and findings:

A. The Importance of Tester Effect on I.Q. Test Results: All tests were conducted by three psychologists, two of them Puerto Rican, (Tester A and Tester B) and bilingual in Spanish and English, the third non-Spanish speaking (Tester C) but experienced in testing Puerto Rican children fluent in English. The scores attained by the children tested by Testers A and C approximated each other (the means 97 and 99, the S.D.'s 10.2 and 7.9 respectively). The scores of children tested by Tester B were considerably lower (M-79; S.D. 12.2). A series of analyses were undertaken to determine the source of the differences: (a) there were no significant inaccuracies in the scoring of any of the testers; (b) all tests were administered within the standard procedure; (c) there was no statistical significance in the number of behavior problem children appearing in the group of Testers A and B; (d) there is no statistical significance in the ordinal position or family size of the children tested in both sub-samples; (e) however, the amount of verbalization appearing in the test protocols of those children tested by Tester A is significantly higher than in those done by Tester B. The main source of this difference in amount of verbalization appears to be in the strikingly different personalities of the two Puerto Rican testers: Tester A is highly verbal, warm, out-going and establishes rapport and inter-personal relationship with both adults and children. Tester B, while competent and experienced, is more formal and reserved in her inter-personal involvement, with relatively little spontaneity and verbalization.. While further analyses of these sub samples is being undertaken, the tentative conclusion is that the difference in test scores attained by the two groups of children is due to the good rapport established by Tester A and the less adequate rapport established by Tester B.

All children between the ages of 6 and 14 were tested with the WISC (Testers A and B); those from 15 to 17 years were tested with WAIS (Tester C).

B. The Problem of I.Q. Score Decrement with Increase in Age: The literature on intelligence testing states frequently that among disadvantaged children the I.Q. scores decrease as the age of the child increases. This has not been the finding of this study. The 95 children in the longitudinal sample are tested with the Stanford Binet Form L as they become three years of age. a) A comparison of these three year old I.Q. scores with the older group of siblings reveals no age decrement in I.Q. score; b) A comparison of children in the 6 - 8 year group with those in a 12 - 14 year group also reveals no age decrement. While these comparisons are not truly longitudinal, the children compared at different ages are from the same families. A testing program of these children from the longitudinal sample who have become six years old is now in progress, using the same instrument (Standord Binet Form L) and that was used when they were three. When this program is completed data will be available for a comparison of I.Q. scores of the same children at different ages.

C. Academic Achievement is Below Normal: Using the Metropolitan Reading Achievement Test (Comprehension) as the basis for assessment, the reading level of 75 of the 136 children for whom school records are available, shows that only 7 read above grade level, 1 reads at grade level and the remainder read below grade level. 68% of this sample of school-age siblings reads below the norm established for their individual schools (a median, with half reading above and half reading below that level) by the New York City Board of Education in 1965. This finding is in keeping with that noted in the extensive literature on the academic achievement of disadvantaged children. For those children for whom there are no records of the Metropolitan Reading Achievement Test (Comprehension) but for whom there are other tests, equivalency scores are being determined so that a consistent measure of the academic achievement of all of the 136 children will be available.

In order to assess the psychological functioning of each child in school, a Classroom Behavior Inventory adapted*from utilizing 190 items (categorized into 38 scales such as Cooperation, Academic Interest, Self Confidence, Leadership, Attentiveness, Resentfulness, etc.) was rated on a four point scale by a significant teacher for each

---

*(adapted from Shaefer, Aaronson and Burgoon, Laboratory of Psychology, N.I.M.H. 1965)

of the 136 children. These Inventories are now being scored and will be correlated with both the records of academic achievement and with information regarding the family functioning and home environment drawn from other study phases.

D. Differences in Behavioral Style: Behavioral observations taken in factual, non-interpretative narrative form and detailing specific aspects of the 3 year old child's behavior (as the Stanford Binet Form L was administered) show striking differences in behavior between 60 Puerto Rican children and 118 of the middle class children. An analytical method classifying the childrens' responses to the tester's various demands for cognitive performance into "work" responses and "no-work" responses showed the following results: a) the middle class children responded to demands for cognitive functioning by making a greater proportion of work responses than did the Puerto Rican children; b) an initial failure to work on the part of the middle class children was more frequently converted into a work response than it was among the Puerto Rican children; c) middle class children responded much more frequently to the cognitive demands by verbalization than by action or gesture, contrary to the responses of the Puerto Rican children; d) the character of the verbalization of a middle class child in relation to non-work responses were usually rationalizations for not working, ("I haven't learned that yet") , while the Puerto Rican children responded with irrelevant statements ("I want my mommy"). The findings were unchanged when I.Q. level, ordinal position and family size were controlled.

Our hypothesis as to the cause of the different functioning of the two groups is derived from impressions gained during the periodic contact with the Puerto Rican and middle class families during the longitudinal studies. The atmosphere in the Puerto Rican families appeared to be one that encouraged social interaction rather than task completion. This attitude pertained not only to the children's behavior but also to the mothers' attitudes and behavior in terms of the timing, scheduling and completion of the interviews. On the other hand, the atmosphere in the middle class families favored and was organized to produce regular and systematic improvements in the children's skills. To validate these impressions additional data is required. It is anticipated that a fuller picture of the life styles and patterns of Puerto Rican child care will emerge from other on-going study phases structured to collect such data.

E. Language Development is not Retarded in this Sample by Bilingualism: Literature dealing with disadvantaged children frequently indicates that bilingualism results in a deficiency in language development. ( ). It would appear that a number of investigators have confused "language development" with "limitation of vocabulary". In order to determine whether the Puerto Rican school-age children in the sample reveal any deficiency in linguistic development two subtests of the WISC (Comprehension and Similarities) making a maximum demand for language functioning were compared with two other subtests of the WISC (Picture Arrangement and Block Design) requiring minimum language demand. The protocols of 40 children (20 tested by

Tester A and 20 by Tester B described previously) of varying I.Q. levels were selected and the scores on the above four subtests tabulated. There is no significant difference between their level of functioning on the two verbal tests and the two performance tests. This finding suggests that within this group of children language development in relation to performance and over-all intellectuality is not impaired. A specific test of the children's bilinguality is now being scored and tabulated.

F. Child Care Practices, Home Environment and Family Characteristics: Data in these three areas has been or is presently being collected, itemized and scaled. Information regarding the child care practices of Puerto Rican parents in relation to pre-school children (feeding, weaning, sleeping, elimination, sexual activity, discipline) is available from the longitudinal interviews undertaken in connection with the study of behavioral development of the 95 pre-school children. Rating on degrees of permissiveness, restrictiveness, consistency, flexibility, punitiveness, etc. will be available for inter-family comparisons and for comparison with the middle class families.

Data regarding both child care practices and educational attitudes as they affect the academic achievement of the school-age siblings is currently being collected through a specially developed protocol on home environment. Initial analysis shows that this data will make possible a number of ratings, both quantitative and qualitative, in several categories, among them: 1) Parents' interest in academic achievement; 2) Parents' knowledge of and involvement in the educational progress of the child; 3) Parental aspiration for education of the child; 4) Parents' occupational goals for the child and their planning to help him achieve these goals; 5) Family aspirations and occupational goals; 6) Leisure time activities of the family and the child; 7) Social models help up to the child; 8) Interest in and extent of family acculturation; 9) Availability and use of materials and facilities in relation to education; 10) Nature of toys, games, hobbies available to child; 11) Esteemed values in familial and social interaction; 12) Family press for task performance.

The senior staff member in charge of sample maintenance and field work has maintained continuous contact with the 72 Puerto Rican families since 1961. In addition to her regular visits for interviewing purposes, she has been called upon by the Puerto Rican families for special assistance and advice. During these contacts she kept detailed notes of events and situations. These notes are now being organized in systematic form according to a protocol developed for this purpose. Early examination of the description of these family characteristics shows that comparable data in all categories exists.

Conclusion

Inasmuch as this is an interim report and many analyses of data are not completed, only a relatively few conclusions can as yet be drawn from the investigations. The following appear to be significant: 1) this population of lower class Puerto Rican children are retarded in school achievement, a finding consistent with that regarding disadvantaged children in general found by other workers. 2) However, the finding, that in these families the children do not show a decrement in I.Q. level between pre-school and school ages, indicates that this retardation in academic achievement is not the result of cognitive defects resulting from presumed deficiencies in the pre-school home environment (cultural deprivation, etc.) For if such cognitive defects had indeed developed, the I.Q. level in the children of school age would be depressed in comparison to the three year old level. 3) Other factors must therefore be responsible for retardation of academic achievement in the group: a) poor schooling is a possible source; b) the teaching approach in the schools may be oriented toward the middle class child who is task-oriented and this approach may not be optimal for learning for the child who is comparatively untrained in task-performance and who is dominantly person-oriented; c) it is also possible that some factors in the home environment may account to some degree for retardation in academic achievement. Our analyses of the latter is not yet completed.

II. INTRODUCTION

The study has had the following objectives: 1) The identification of the experientially determined patterns of behavioral and intellectual functioning of a population of lower-class Puerto Rican children in New York which appear detrimental to optimal learning and intellectual development: 2) The identification of the specific child-care practices, parental attitudes and other intrafamilial and extrafamilial influences which produce such detrimental patterns in the children; 3) The identification of the favorable factors in the environment of these disadvantaged children which can be utilized in programs to prevent or remedy experientially produced mental retardation; and 4) The determination of the influence of bilinguality on intellectual functioning.

A population of 72 Puerto Rican families with 258 children has been utilized as the study sample. Data from a population of 136 advantaged children from middle class native-born parents who have been followed since 1956 have also been available for comparative analyses.

A large number of studies in recent years have described various behavioral, attitudinal and cognitive patterns in disadvantaged children which are considered to represent handicaps to optimal intellectual development. Among these are: (A) Weaknesses in the utilization of abstract symbols and complex language forms; (B) Weaknesses in the utilization of abstract cognitive processes with marked tendency to favor concrete, stimulus-bound cognitive processes; (C) Perceptual styles which are suboptional for the demands of formal learning; (D) Low-level academic task orientation and variable levels of general task involvement; (E) Low-level aspiration and motivation for academic achievement, as well as in relation to some social norms; (F) Utilitarian and materialistic attitudes, which in the light of limited horizons and opportunities function as depressants to motivation, aspiration and achievement; (G) Contradictory attitudes toward self and others with low self concept. In general, these patterns are considered to result from various unfavorable intra and extra-familial environmental influences acting upon the children. (1,2,3,4)

In view of the host of studies of disadvantaged children it is indeed surprising that so little systematic information exists as to specific psychological characteristics of various groups of lower class children as well as the relationships of such characteristics to parental child-care practices and other features of the early home environment. As stated by Wilkerson in a recent review of the research literature: "The bulk of the literature on the disadvantaged child makes little or no pretense at systematic inquiry, but is frankly speculative or descriptive. Its predominant emphasis is on a wide range of educational approaches and programs - preschool through college - which are designed to compensate for presumed inadequacies in the primary socialization of the children of the poor. These rapidly increasing reports and discussions of compensatory educational programs abound in ad hoc premises, trial-and-error practices, and subjective appraisals." (5)

Many factors may contribute to the difficulties in undertaking and carrying through systematic studies of lower class children. In our own review of the literature we have been especially struck by the importance of a number of considerations which are either ignored or given insufficient attention in many studies:

1. The category "lower class children" is not a homogeneous one. Marked differences in family structure, parental practices and attitudes, economic status, ethnic background can exist which may result in significantly different influences on psychological development. Thus, Pavenstedt (6) has pointed out that in nursery school situations the behavior of lower class children from disorganized home environments differs markedly from that observed in children of the same ethnicity and social class but from stable families and home situations. In the absence of detailed knowledge about familial organization and other associated aspects of the familial microenvironment, it is difficult to decide whether differences in performance reported in a specific study derive from differences in social and cultural background or from differences in family stability and organization.

2. Behavioral functioning may be influenced by levels of general health, neurological intactness and perceptual and intellectual functioning. This consideration is ignored in many reports, even though it is especially pertinent to the study of lower class children. There is substantial evidence that the conditions of life to which such children are exposed, both prenatally and postnatally, can have significant unfavorable influences on all phases of their development and functioning (7,8).

3. There are a number of different aspects of psychological functioning, such as overt motor behavior, patterns of emotional expressiveness, temperament, language usage, style of social functioning, cognitive characteristics, etc. As a result, behavioral investigations of lower class children can take many directions as regards the specific characteristics to be studied. It is likely that comprehensive knowledge of lower class children will be best obtained by a series of such selectively focused studies.

4. The application of non-differentiated criteria to differing segments of the population has not allowed, in theory or in practice, for the behavioral shifts which may take place when a group of lower-class children is placed within a middle class setting. Dr. Robert Coles describes these behavioral differences in his observations of the children of migrant farmers:

"There is a striking difference in the relationship between the child and his family 'at home' or in travel, and the child at school, in the fields, even on the streets. At home, the children play together easily and warmly. They are very free with their parents, and their parents with them. Open expression of love and demonstrations of it are seen....Their children are much less secretive, resort to much less furtive and symbolic maneuvers to express their attachment and direct love for their parents, and also their anger. Yet in contrast to such physical intimacy and propinquity, openness of feeling and of anger, closeness of relationship between children, when migrant children meet many people on the 'outside' (as their parents are apt to refer to anyone from a teacher to a farm manager) they often appear isolated, guarded, withdrawn, suspicious and apathetic or dull.

"Thus, in many respects migrant children are brought up to have two rather explicit ways of responding to the two worlds of their families and 'others'. Though of course all children learn a version of that kind of distinction, there is a contrast to the twofold behavior in migrant children, a sharpness to that differentiation, that is quite special. It is at times uncannily as if they had two sets of attitudes, two personalities, one for their family, one for the rest of the world." (9).

These observations suggest strongly, as do the findings of other workers, that if lower class youngsters are seen only briefly and by examiners who differ from them in social class and ethnic origin it is difficult to establish the type of rapport conducive to best functioning (10, 11). Consequently, in many instances one cannot decide whether the obtained performance is the product of poor relations of the child with the examiner or a true measure of the child's capacities.

5. Systematic criteria for the categorization of group behavioral norms for disadvantaged children of specific socio-economic and cultural backgrounds and for the identification of the psychiatrically disturbed disadvantaged child do not exist. Such systematic criteria for the normal and deviant child have been established only for middle class groups. As stated in a recent psychiatric textbook, "There are remarkable differences in aggression, sexuality, and dependency needs in the different social classes of a single culture...In summary, the concept of health and normality is still quite muddled, with empirical research mostly lacking." (12). It is clearly of prime importance in any study to be able to distinguish those behavioral deviations which represent functional adaptive responses to the disadvantaged child's life experiences and environment from those which represent idiosyncratic maladaptive patterns of psychopathology. The former group represents those children who are psychiatrically healthy, who are functioning according to the norm of their lower-class disadvantaged group, and who can be expected to respond positively to appropriate teaching methods. To make such a distinction requires clinical psychiatric evaluation of the significance of such behavioral deviations when present, rather than the uncritical application of middle class norms to such children (13).

In the present study, concern for the above considerations influenced the selection of the sample and the methods of data collection. The sample comprises

72 Puerto Rican families most of whom live in public housing projects in the East Harlem area. The families were selected consecutively from the list of new infants registered at two of the municipal baby health stations in the lower Harlem area, starting in September 1961. Three of the fathers are skilled workers, 37% are semi-skilled, and 61% are unskilled workers. One has had professional education. The average number of years of schooling of the fathers is 8.1 years, and of the mothers 8.7 years. Sixteen percent of the fathers and 19% of the mothers are high-school graduates. Eighty-eight percent of the mothers and 95% of the fathers were born in Puerto Rico; the remainder were born in New York City of Puerto Rican parentage. The number of children in the families varies from one to eight. The total number of children in the 72 families is 258. Sex distribution of the children is equal. The study population is ethnically homogeneous. Family stability is high. The incidence of prematurity and complications of pregnancy and delivery was very low as was the number of children with deviant developmental courses with respect to the achievement of motor landmarks - indications that the sample does not contain a substantial number of neurologically damaged children. Information was collected regarding the health of the children as well as any symptoms of deviance in behavioral functioning. In all cases where such symptoms were reported by the parents or school, a clinical psychiatric evaluation of the child was done.

Parent interviews and behavioral observation of the children have been done by Puerto Rican bilingual interviewers and observers who have maintained regular and frequent contact with the families. Psychometric testing has also been done by Puerto Rican psychologists, except for the testing of 9 of the oldest children.

It has thus been possible to study the intellectual functioning and academic achievement of a sample of lower class children with minimal contamination by family disorganization, ethnic heterogeneity, neurological damage or poor nutrition. It has also been possible to control for the variable of psychiatric abnormality through the clinical psychiatric evaluation of all children exhibiting behavioral deviation.

The conclusions drawn from a study such as the present one are, by necessity, limited to the type of population included in the study. The findings do contain inferences and hypotheses which can be tested on other populations composed of a different socio-economic and ethnic groups. It is our opinion that an accumulation of similar bodies of data on a number of different populations will provide excellent opportunities for cross-cultural studies and comparisons. We have had the opportunity to make a number of such cross-cultural comparisons with a group of advantaged children in native-born families. The children in these native-born, middle-class families have been followed in a longitudinal study of child development in progress since 1956. A number of reports on the findings of this latter study have appeared in the professional literature. There are 136 children in 84 families in this group, in which both fathers and mothers are highly educated and are distributed largely within professional and business executive occupations. The section of this report dealing with findings will report comparisons between the Puerto Rican and middle class groups in regard to specific behavioral styles of the children and the child care practices of the parents.

III METHODS AND ANALYSES

Because a wide variety of tests have been employed in this project, a number of different methods of data collection and of data analysis have been used. They are as follows:

A. SAMPLE

In the Introduction (Section II, above), the sample and the method of obtaining it have been described. The initial sample was collected as part of a longitudinal study on the behavioral development of the new infant children registered in two municipal baby health stations in lower Harlem in September, 1961. This project was supported by the National Institute of Mental Health from September 1, 1961 through August 31, 1965, and had as its prime purpose a study of the temperamental characteristics of these children in early childhood and a comparison of these characteristics with those of the 136 middle class children referred to previously. This initial group of Puerto Rican infants numbered 98 and will be referred to hereafter as the preschool group. The present study includes not only these younger children but also their older school-age siblings. As of September, 1967, ages of the two groups of Puerto Rican children are distributed as follows:

TABLE I

AGE DISTRIBUTION* OF PUERTO RICAN SUBJECTS IN LONGITUDINAL STUDY OF BEHAVIORAL DEVELOPMENT

Age				No. of Children
Yrs.	Mo.	Yrs.	Mo.	
6	0	6	11	21
5	0	5	11	49
4	0	4	11	17
3	0	3	11	10
2	0	2	11	1
				98**

*As of September 1, 1967

**Returned to Puerto Rico at different stages of data collection - 6
Dropped out of study at different stages of data collection - 2
8

TABLE II

AGE DISTRIBUTION* OF SCHOOL-AGE PUERTO RICAN CHILDREN

AGE				NO. OF CHILDREN
Yrs.	Mos.	Yrs.	Mos.	
6	0	6	11	8
7	0	7	11	22
8	0	8	11	23
9	0	9	11	17
10	0	10	11	19
11	0	11	11	13
12	0	12	11	20
13	0	13	11	8
14	0	14	11	7
15	0	15	11	3
16	0	16	11	6
17	0	17	11	2
18	0	18	11	2
				150**

* As of September 1, 1967

** Non-school age siblings are as follows:

Over 18 years of age	12
Under the age of the subjects in the longitudinal study (Table #1)	16
Total	28

Continuous contact has been maintained with the families by staff interviewers of Puerto Rican background who are fluent in both Spanish and English. Rapport between the parents and interviewers was established quickly and maintained thereafter at a high level. The attrition rate has been only 5% (the five families lost to the study are not included in the sample statistics). The mothers frequently confided their marital or other problems spontaneously to the interviewers, and also indicated that certain data given freely to the interviewers regarding specific child-care practices and parental problems were sometimes withheld from the doctor or nurse at the baby health station.

Some data pertaining to the demographic characteristics of the Puerto Rican families were collected during the initial study of temperamental characteristics. For the purposes of the present study of the intellectual retardation of the older siblings, categories of demographic information were expanded to include:

1) Birthplace of parents: urban/rural
2) Residential history: date of migration to U.S.; length of time in U.S.; length of time in N.Y.C.; number of residential changes between Puerto Rico and United States; number of times family moved in past five years; number of years in present residence; types of housing occupied during past five years; type of housing presently occupied (including size)
3) Education of parents: (in both Puerto Rico and U.S.)
4) Economic status: present occupational status of both parents; unemployment history during past two years; level of household income; major and additional sources of household income; changes in income level over past five years
5) Marital history: age at time of first marriage; number of previous marriages; total number of children by previous marriages; present marital status
6) Religious identification: level of religious activity
7) Community activity: types of organizations belonged to and level of activity
8) Household composition: number of persons in household; changes in household composition in past five years
9) Pre-school education of each child in the family: Headstart; Child Day Care Center; organized play group; nursery school; kindergarten
10) Maternal assistance: type and extent
11) Parental illnesses in past five years: manner in which household routines were altered
12) Deaths: deaths in immediate and extended family in past five years

The data for these categories were collected by the Puerto Rican interviewers who visited the families at regular intervals.

Hollingshead's two-factor analysis of socio-economic status will be undertaken to establish comparability with samples in similar studies and with the middle class sample in the present study. In addition, individual variables will be grouped and the items in each group will be assigned relative weights so that over-all indices of major demographic factors are available. By assigning appropriate weights to relevant items grouped under "marital history", for example, a summary value of each family's marital stability can be established, inter-familial comparison undertaken, and correlations developed with the academic status of each child in the family. Correlations of such indices can also be made with significant parental attitudes and child care practices.

The population available for comparative purposes comprises 136 children in 84 middle class families living in New York City and suburban areas who have been followed continuously since early infancy in a study of child development supported by the National Institute of Mental Health. Methods of data collection and test procedures for the infancy and pre-school period have been substantially the same as those utilized for the Puerto Rican sample. The middle class children are now five to eleven years of age; sex distribution of the children is equal.

Analysis of the demographic data regarding the parents of the middle class children indicates that 87% of the fathers and 89% of the mothers have had some college education; 64% of the fathers and 36% of the mothers have received various postgraduate degrees. 75% of the fathers are professionals or business executives, 20% are small business men and 5% are skilled workers. The occupations of the mothers show a similar distribution except for 20% who are secretarial workers. With but a few exceptions, all parents are native-born.

B. ACADEMIC ACHIEVEMENT AND SCHOOL FUNCTIONING

1) School Records

Through the cooperation of the New York City Board of Education, and the Archdiocese of New York it was possible to duplicate the entire school record for school-age child in the sample. School records have been obtained for 136 Puerto Rican children. Of these, 100 are in public schools and 36 are in parochial schools.

These records consist of the grades given the child in each class up to the point of data collection; his scores on those achievement and aptitude tests which he has been given; and informal notations by the teachers on his classroom behavior, educational attitudes, special interests or talents, and language problems.

Among the tests for which there are scores and/or grades are:

Metropolitan Reading Achievement Test (comprehension and word knowledge)
Metropolitan Arithmetic Test
Pintner General Aptitude and Non Language Tests
Pintner Cunningham Test
Gates Primary and Advanced Reading Tests
Otis Quick Scoring Test
Iowa Basic Skills Aptitude Test

Otis Beta and Gamma Tests
New York Inventory of Mathematical Concepts
Kuhlman Anderson Tests
New York State Reading and Arithmetic Tests
Inter American Tests

None of these test scores or grades is consistently present for all children. In some instances the child may have been absent during the administration of a given test, or, as indicated by a report of the Board of Education, the test may not have been administered to a number of the children in our sample in a given year* because of language difficulties. In addition, while both national and city-wide norms in New York City are based on the Metropolitan Reading Achievement Test, this test has been given in the parochial schools (under Title I) in New York only since 1966. Reading achievement scores are recorded only for pupils in the second grade and beyond. Thus, for the 100 Puerto Rican pupils in our sample who are in public school, there are 75 records of scores for the Metropolitan Reading Achievement Test in reading comprehension. These scores are presented in Section IV (Results and Findings) in relation to both national norms and the norm for the child's individual school in order to assess the degree of achievement of each child. Currently, equivalency scores for those children given different reading and arithmetic tests are being developed so that the achievement level of a larger number of children in the sample may be determined. Correlations have also been developed between the I.Q. scores of the children and their level of academic reading comprehension as one measure of determining sources of intellectual retardation within the sample. Finally, correlations between the mental age of the children and their academic achievement and grade level are being developed.

2) Classroom Behavior Inventories

In order to estimate the level of the children's social, emotional and task-oriented behavior in the classroom, a Classroom Behavior Inventory (I and II, see Appendix B for copy of protocol) was developed based upon a similar instrument worked out by Schaefer, Aaronson and Burgeon in the Laboratory of Psychology, National Institute of Mental Health in 1965. The instrument as adapted for this study consists of a total of 190 items descriptive of 38 behavioral traits (five items for each trait) describing "specific, concrete, observable behaviors" (13). The protocol is designed as a checklist for each child on which the teacher may rate each item of behavior or attitude on a four-point scale: "Very Much Like"; "Somewhat Like"; "Very Little Like", or "Not At All Like". The 38 behavioral and attitudinal traits described by the items are:

---

* "The reading test was not given last year to about 54,000 non-English speaking pupils." New York Times, December 23, 1966

Concentration
Submissiveness
Inquisitiveness
Academic Seriousness
Competitiveness
Work Fluctuation
Academic Interest
Methodicalness
Independence
Self Confidence
Low Self-Esteem
Cooperativeness
Leadership
Self-Consciousness
Perseverance
Attentiveness
Gregariousness
Academic Ability
Hyperactivity
Active Helpfulness
Cruelty
Consideratness
Attention-seeking
Resentfulness
Inappropriate Talkativeness
Distractibility
Destructiveness
Compliance
Argumentativeness
Dominance
Impulsiveness
Kindness
Friendliness to Teacher
Conscientiousness
Withdrawal
Verbal Expressiveness
Achievement Orientation
Dependence

A total of 136 Classroom Behavior Inventories have been rated by the teachers of the children and scored. Initial findings indicate a high degree of variability in the findings. The trait scores for each child will be searched for potential correlations with similar data indicated in the Home Environment Interview. Levels of task orientation, of cooperation, attentiveness, hyperactivity, etc. as indicated by teachers and parents will be compared. Teacher's evaluations of the child's task orientation will be compared with task performance levels as indicated by other protocols. Over-all academic achievement of the child will be correlated with positive and negative findings related to traits and attitudes.

C. INTELLECTUAL AND PERCEPTUAL TESTING

All testing of Puerto Rican children has been done by Puerto Rican psychologists fluent in both Spanish and English with the exception of the nine oldest children who have been tested by a non-Spanish speaking psychologist. She, however, has had considerable experience in testing Puerto Rican children fluent in English.

1) Pre-School Children

The 90 younger pre-school children in the sample were given the Stanford Binet Test Form L. The standard test procedure was carried out with the following exception: the Puerto Rican children were tested either in Spanish or English on the basis of the psychologist's estimate of the language in which the child possessed greatest competence. When the Spanish language version of the test was used, it was the Stanford-Binet Form L modified and translated for use in the Commonwealth of Puerto Rico for the intellectual evaluation of Spanish-speaking children. Rapport between the psychologist and the children was especially good in that all of the Puerto Rican children were well acquainted with the psychologist as a consequence of the other phases of the longitudinal study.

In the course of test administration, staff observer makes a detailed, factual narrative of the child's motor and verbal responses to each test item presented by the testing psychologist. The observer also records in detail the characteristics of the child's reactions to the entry into a strange room, to the unfamiliar examiner and observer, to being asked to leave his mother behind in the waiting-room, and to the tester's demands with the individual test items. Also recorded are the child's responses to any extraneous stimulus, such as the ringing of the telephone in the next room. At the end of the test the child is asked to help in cleaning up and is then invited to play as he wishes with the toys in the room and his behavior is again noted. This test situation thus provides data not only on levels and profiles of intellectual functioning, but also as to his behavior in a new situation, to separation from the mother, to a series of demands presented in sequences, and to the opportunity for free play. Significant data are also frequently obtained as to special characteristics of the mother's attitudes and behavior. With those children whose performance is not sufficient to determine an I.Q. score, the test is repeated a year later.

As these children reach six years of age they are being tested again with the same instrument. By June, 1968, 57 of these younger children will have reached six years of age.

2) Older School-Age Siblings

The school-age siblings have been given a battery of tests including the WISC, (WAIS to the older children) a Problem-Solving Task, a perceptual test of auditory-visual integration and a sub-test of the WISC, a vocabulary test in Spanish.

a) WISC: this test was administered by bi-lingual psychologists to the school age children from 6 through 14 in the standard manner with the exception that the test was conducted in either Spanish or English depending upon the psychologist's evaluation of the child's linguistic competence. The Spanish form used is that translated for use by the Department of Education in the Commonwealth of Puerto Rico.

b) WAIS: siblings 15 years of age and older were tested by an English speaking psychologist, experienced in testing Puerto Rican children who are fluent in English.

c) Problem Solving (Bead-in-Tube): the basic task presented to the child involves the removal of a small wooden bead from a standard test-tube. The bead is shown floating in about one inch of clear water.. The test-tube is fastened to a small stand and may not be lifted, turned or broken.

(i) Problem without Materials--at first, the problem is presented unaccompanied by any additional materials or implements that may suggest any solutions. The child is asked how he could get the bead out, and/or what things he might need. A total of two minutes are allowed and all responses made within this period are recorded. Each 60 second interval is separately recorded.

(ii) Materials Present--at the close of the two minutes, (a), a tray of materials is placed in front of the child, and he is told that he may use any of the materials in order to get the bead out of the tube. The tray includes:

Dropper with large rubber bulb
8 inch lengths of soft copperwire
8 inch lengths of string
small metal hook
metal weight
plastic tube
desk pen
tweezer
1 oz. bottle of red colored water

The child's responses and manipulations of the "tools" in each successive 60 second interval are recorded. This is continued for at least 3 minutes, but 4 are allowed if the child remains actively interested. If at the end of this period, the problem is not solved, the solution is demonstrated - the water is poured into the test-tube and the bead floats to the top where it is easily reached.

(iii) Weighted bead--the problem is again presented while the tray of materials is still available. This time, however, the bead is not floating but submerged, in one inch of water, at the bottom of the test-tube. The child's verbal responses and solution attempts are recorded for each successive 60 second interval. After three minutes the child is asked the following questions:

1. What do you think is happening now?
2. Why is this one more difficult?
3. Is this one different?
4. Why doesn't it (the bead) come to the top?

(d) Audio-Visual Integration (14): The specific task for the subject is an auditory-visual multiple-choice pattern matching test which requires the child to identify that visual dot pattern from among three which he judged to be the same as the pattern of taps that was auditorily presented. The task therefore examines the child's ability to equate a temporally structured set of auditory stimuli with a spatially distributed set of visual ones.

The auditory stimuli are separated by either a half second or a one second silent interval. The visual patterns from which the specific selection is made are presented immediately after the completion of the auditory stimulation. After demonstrating pre-test familiarization patterns for the child, and illustrating in three subsequent tapping examples the correct relationship between the tapped-out patterns and the response cards, the subject is told: "Listen carefully and pick out the dots which look like the taps you hear". Following this instruction the taps are sounded and the specific multiple-choice card containing the visual pattern appropriate for the presented auditory pattern is shown to the subject. Only first choices are accepted and no changes in response are permitted.

The subject's score is the number of correct choices made on the ten test items.

(e) Spanish Vocabulary Test: the WISC vocabulary list is used in the Spanish translation done by the Department of Education in the Commonwealth of Puerto Rico. The test is administered first in Spanish, then in English. The child's responses are recorded. The degree of accuracy in both languages is a measure of the child's bilinguality. The child's score consists of the number of correct answers.

3) Other Psychological Data About the Children

(a) Parent Interviews: in the course of periodic (semi-annual and annual) interviews with the parents of the longitudinal subjects, specific questions were asked regarding the presence or absence of behavioral disturbance in the pre-school group. The behavioral responses of each child to any special or unusual environmental event or stress such as unemployment, illness marital discord were also determined. As part of a separate study, it has been possible to refer all children with suspected behavioral deviation to a Spanish-speaking psychiatrist for clinical evaluation.

The accuracy of the mother's reports was validated by independent direct observation of the children's behavior over a 2-4 hour period in 42 of the families.

(b) Three Questions: three questions designed to tap the special interests and aspirations have been asked of the siblings. These questions are:

1. What do you like to do when you are home on a rainy day?
2. What would you like to be when you grow up?
3. If you can not be that, what else would you like to be?

(c) Behavioral Functioning During I.Q. Testing: during the administration of the Stanford Binet test, detailed descriptions of the child's behavior (as described previously, Section C, item #1) has been recorded.

(d) Home Environment Parental Interviews: these interviews, described in the following section of the report, were undertaken to ascertain those aspects of the home environment which may have had a positive or negative effect upon the academic achievement of the older siblings in the study. These interviews have yielded extensive psychological information regarding parental-child interactions, the socialization processes ongoing in the homes and in relation to the environment outside the home; child care practices as they are manifested in relation to infants and young pre-school children in the longitudinal study, and in relation to the older school-age siblings. Categories developed in each of these research areas follow in the next section.

D. THE HOME ENVIRONMENT PARENTAL INTERVIEWS

Because a search of the literature failed to produce an interviewing schedule completely appropriate to our task and sample, this project sought to develop its own instrument for the purpose of identifying significant child rearing factors and family influences acting upon the school achievement of Puerto Rican children in New York City.

A review of the literature of Puerto Ricans in New York City was undertaken in order to obtain a better understanding of the characteristics of this group. Particularly valuable was the work of Padilla, Glazer, Handlin, Senior, and Mills et. al (15,16,17,18,19).

As a potential model for this protocol Richard Wolf's original paper on the Measurement of Environments (20) was used as well as the interview schedule and rating scales which his group used with a sample of 60 mothers of fifth grade children from both the middle and the lower class. Wolf attempted to determine what characteristics in the home life of these children interacted with individual characteristics such as intelligence to produce different academic achievements in the two social classes. Wolf's schedule represented an advance over other protocols in that it attempted to measure environments and sub-environments psychometrically. Furthermore, Wolf emphasized that he was interested in what parents did in each social class, not in their status characteristics. His interview schedule contained 63 questions which attempted to tap: (a) the climate created for achievement motivation, (b) the opportunities provided for verbal development (c) the nature and amount of assistance provided in overcoming academic difficulties, (d) the intellectual activity level of the significant individuals in the environment, (e) the level of intellectuality in the environment, and (f) factors related to the individual. These variables were divided into subvariables. For example, the specific characteristics defined as comprising the climate in the home for achievement motivation were:

1. parental aspirations for the child's education
2. parents' own aspirations
3. parental concern for academic achievement
4. the social press in the home for academic achievement
5. the rewards accorded academic accomplishments
6. parental knowledge of the educational program of the child
7. preparations made for the attainment of educational goals.

Another influence upon the development of the protocol, came from the work of Basil Bernstein (1966). (21) Bernstein's work with English disadvantaged families led him to the conclusion that the superior language development of the middle class child, so crucial to school success, was in no small measure due to differing child-rearing practices in the middle and lower class families. He hypothesized that the mere restrictive methods of rearing prevalent in the lower class, unmediated by language, are very different from the child-oriented appeals used in the middle classes in which both language and reasoning play a large part.

The Sears, Maccoby and Levin Interview Schedule provided insights into the relationship of child care practices to social class. The Puerto Rican schedule has utilized their technique of wording questions to reduce threat and to increase both spontaneity and open-endness. The theoretical framework for some of the five categories with their sub-categories in the Puerto Rican schedule came also from the work of Ferman et. al. (23) The latter work emphasized the following differences between middle class and disadvantaged families:

1. A difference in aspiration level
2. A difference in the perception of life chances, related both to aspiration level and actual expectation
3. A difference in the ability to defer gratification (DGP, deferred gratification pattern), again related to 1. and 2.

The first schedule developed by the research team had several weaknesses. One of them was that many of the questions and indeed some of the variables seemed more suitable for the middle class American than for the disadvantaged Puerto Rican in a big city. Wolf's basic interest was in comparing the middle class with the lower class to determine both the differences and similarities between the two. This study's major interest was in a relatively homogeneous sample of one ethnic group in one social class. Our major concern was to determine whether or not there are, within this group, basic differences in child-rearing practices related to educational achievement, and to correlate these differing practices with the school achievement of the Puerto Rican children in the sample.

Another weakness was that Wolf's rating technique was not adequate as an overall assessment of a group of questions. It was conceivable that a family could be rated high on one question within a particular variable such as achievement motivation and low for another question under the same variable.

Inasmuch as previous interviewing of the Puerto Rican families had shown that the interviewing process was frequently interrupted, postponed or delayed, the first draft of the interviewing schedule consisting of 96 groups of questions was considered too long and unwieldy for administration in a single visit. Accordingly, it was decided to develop a much simpler and shorter instrument consisting of single questions which could be scaled individually rather than in groups.

The work of Shipman, Hess and Brophy (24) in developing a 27 question inventory of parental attitudes toward educational practice appeared to have some relevance to the data sought for from the Puerto Rican sample. The use of an inventory as a validating instrument for the interviewing schedule seemed promising. A number of versions of a parental inventory were developed before the final draft which consisted of 38 questions.

A decision was also made at this point to develop an interview of no more than ten questions to ask directly of one child from a specific age group within each family in the sample. These questions paralleled some of the crucial questions asked of the mother and were also in tune with the hypotheses.

The final revisions of the main interviewing instrument (Home Environment Interviewing Schedule) reduced it to 53 questions, each to be quantified by a five point scale. The total interviewing procedure would thus consist of administering the Home Environment Interviewing Schedule, the Parental Educational Attitude Inventory (38 questions) and the ten questions to be asked of one child from each family. The protocols were than pre-tested in the field. The protocols were in both Spanish and English and the interviewers, themselves bilingual, were to use the language in which the respondent had the greatest facility.

The results of the pre-test indicated that the major field difficulties encountered were the length of the entire interviewing procedure, and the failure of many of the scales in the Home Environment Quesionnaire to appropriately rate the response. Further cuts were made in the Home Environment Questionnaire and some of the scales were revised. The results of the pre-test and the subsequent revisions were then turned over to Senior research personnel for final evaluation prior to full-scale field work.

A detailed analysis of the pre-test results indicated that further radical revisions would have to be made. The main problems were:

1) the responses of the mothers to many of the questions were too limited .

(in some cases they were monosyllabic)to yield scalable data. This appeared to be the result of an over-emphasis on developing a short questionnaire which would be easily quantifiable rather than concentrating on the best method of eliciting from this sample adequate and concrete data regarding child care practices related to educational achievement.

2) in an effort to reduce the Home Environment Questionnaire to a length suitable for joint administration with a Parental Educational Attidue Inventory, too many probes regarding the home environment had been eliminated thus sacrificing both the richness, and extent of responses.

A re-examination of the total interviewing situation indicated that while the problem of the time taken to administer a protocol concerned with home environment was important from the parents' point of view (the mothers had already been interviewed periodically over a span of six years for a cororally study and for two years for the current sibling study) it was felt that the level of parental cooperation with and understanding of the goals of the study were sufficiently high to warrant an interviewing schedule of a more appropriate type to enable the gathering of adequate and insightful data. As a result the research team was advised to return to its original 96 sets of questions, which had been structured in relation to key categories. These sets consisted of a series of primary questions to each of which were appended several probes. These original open-ended questions have the possibility of eliciting fromthe respondents not only their attitudes toward given situations or practices but also the details of what they actually did in relation to such practices and attitudes. This had been the main direction of the Wolf interviewing protocol. The corroborative evidence thus elicited would, it was felt, yield a much wider variety of data that could be more accurately scaled. This format had the possibility of eliciting a wealth of qualitative material, eliminated in the pretest schedule in the interest of brevity. An additional factor recommending the return to the original open-ended format was the character of the Puerto Rican parents as respondents: they tended to relate much more readily and spontaneously to a less structured interviewing procedure in which there were opportunities for relating personally to the interviewer. The six years of interviewing for the cororally Puerto Rican study revealed that the spontaneity and richness in response afforded by a less highly structured or rigid questionnaire was much more productive of the descriptive data for corroborative evidence. It was then decided to eliminate both the Parental Inventory of Educational Attitudes and ten questions to be asked of the child. The time taken to administer these could then be devoted to one expanded parental protocol regarding home environment and child care practices. The time limit for the administration of the home environment protocol was extended; six hours, divided into two interviewing periods of three hours each were deemed possible. Within this framework, two major revisions of the home environment protocol were undertaken: 1) the number of research areas were increased; 2) the specific probes within each research area were expanded and multiplied.

The revised pre-test protocol had twelve major research areas, namely:

1) Parents' interest in academic achievement
2) Parents' knowledge of and involvement in the educational progress of the child
3) Parental aspiration for education of the child
4) Parents' occupational goals for the child and their planning to help him achieve these goals
5) Family aspirations and occupational goals
6) Leisure time activities of the family and the child
7) Social models held up to the child
8) Interest in and extent of family acculturation
9) Availability and use of materials and facilities in relation to education
10) Nature of toys, games, hobbies available to child
11) Esteemed values in familial and social interaction
12) Family press for task performance

To more fully guarantee the quality and extent of the response, it was decided to query the parent regarding only one child in each family. The children about whom the queries would be made were to be selected randomly, thus eliminating any bias in age, sex, ordinal position, or school grade within the total sample.

The interviewers, both bilingual, were instructed to conduct the interview in either Spanish or English according to the respondent's inclination and language facility.

For the pre-test of the third revision of the Home Environment Interviewing Schedule, eight families were selected, four to be interviewed with the first half of the protocol and four to be interviewed with the second half. The results of this pre-test were as follows: 1) it was found possible to administer the interviewing schedule in two separate periods of roughly three hours each; 2) the mothers readily assented to grant this amount of time to the interviewers; 3) questions at the end of each category in the schedule having to do with changes in child care practices and educational attitude over the past five years were eliminated on the basis of yielding insufficient reliable data; 4) several questions which produced repetitive responses were eliminated, but three were retained as a measure of internal validity of the protocol; 5) one of the questions on acculturation was found to be faulty and was re-formulated.

Of the 72 families within the sample, fifty families were found to have children who were within the appropriate school grades: 2nd grade, elementary school through 4th year of high school. It was necessary to start with 2nd grade pupils because achievement test scores are not recorded for children in the New York City public school prior to that grade. Of the remaining 22 families it was found that:

HOME ENVIRONMENT SAMPLING

7 Puerto Rican families in Longitudinal Study
50 Sample for Home Environment Questionnaire

1) Returned to Puerto Rico	6
2) More than 1 child in Sibling Study	5
3) Family in Longitudinal Study has only child	4
4) Siblings too young for school records	5
5) Siblings too old	1
6) Mother didn't give permission for interview	1
	22

The interviews in the twenty-two families not having school children in second grade or above will be conducted as follows: in those families having pre-school, kindergarten, first grade or out-of-school children, the sibling of inquiry will be that child closest to grade 2. The selection of the younger rather than the out-of-school child will not only eliminate retrospectively recalled data which, in previous studies has been found faulty, but will also provide current child care practices, rather than those which might have pertained a number of years ago.

E. FAMILY FUNCTIONING AND HOME ENVIRONMENT

In this area, we have been interested primarily in the ways in which parental functioning and other aspects of the home environment may affect the child's academic achievement and his school performance, social as well as scholastic. The issues with which the research has been concerned include many which the literature on the disadvantaged child has presented: the role of social class, cultural deprivation and economic stress in the academic achievement of the child; problems of socialization encountered in children from varying ethnic and social class backgrounds; bilingualism and its role in the child's scholastic performance; patterns of child rearing among lower social class and minority groups; language competencies of disadvantaged children; problems of reading retardation among the disadvantaged. This study has been particularly concerned with the effect of child care practices and educational attitudes of the Puerto Rican parents on the academic achievement of their children.

1. Child Care Practices

a. Pre-School Children

Detailed information regarding the development of the 90 preschool children in the sample has been gathered from the first months of life onward. Information as to child care practices and attitudes relevant to the age of the child was also obtained at each interview. The areas which were covered include: weaning, breeding, toilet training, sleeping, sexual activities and paternal participation in household chores. The data sought from the parents were the facts of behavior given descriptively. The prime emphasis was on how the baby behaved and what the parent did in specific situations. Whenever parents gave an interpretative answer to a question which required objective description of behavior or procedure, the questions were rephrased and repeated until actual description was obtained. For example, specific dates in relation to weaning consisted of the age at which weaning to the bottle is introduced; the age at which weaning to the cup is introduced; the age to which the bottle still continues; the age at which weaning is completed; the age to which non-nutritive sucking devices continue. As in behavioral studies in general, the emphasis is on the securing of primary, raw factual data. In regard to child care practices, only the practices on-going at the time of the interview were sought; retrospective data, found to be highly unreliable, was not collected.

b. School-age Children: Child Care Practices in Relation to Academic Achievement

Categories of the child care practices characterizing the Puerto Rican parents of school-age children are in the process of development from the on-going field work. These practices relate largely but not exclusively to the children's school functioning; thus the categories below include some of the more generalized procedures of the parents as they manifest themselves in the home. Among the categories clearly available are:

i. Family Press for Task Performance

--Age at which self-care (toileting, dressing, tieing shoelaces, etc. takes place
--Age at which child is asked to run errands outside house. Type of errand; types of places to which child goes
--Attitude of parents toward employment (outside the home) of school age children; appropriate age; types of jobs approved; level of encouragement from parents
--Division of household tasks among the children; degree of regularity and organization; types of tasks undertaken by girls; types undertaken by boys; care of younger children by older siblings; parental attitude toward children's task performance
--Parental action/attitude toward unfinished tasks
--Relationship of toys and play materials to task performance: toy inventory; toy usage; parental participation in toy usage in relation to teaching task performance

--Parental encouragement of special interests/hobbies related to task performance
--Level of child's ability and interest in handling household appliances; level of parental encouragement to do so
--Parental attitudes toward children travelling alone in city
--Parental attitude toward and handling of bilinguality; encouragement to master English; encouragement to master/retain Spanish
--Parental handling and attitude toward children's homework assignments; extent of routinization of homework procedures; attitude toward child's completion of assignments; methods used to induce/encourage higher level of homework performance

ii. Parental Disciplinary Practices

--Parental attitude/action toward younger child's disobedience; toward older child's disobedience
--Parental attitude/action twoard child's disagreement with parent
--Parental attitude/action toward poor report card
--Parental attitude/action toward note from teacher indicating poor homework performance by child
--Division of authority between mother and father in relation to discipline
--Parental methods/attitude toward improvement of school grades
--Parental attitude/action when child leaves task unfinished
--Situations which evoke parental reprimand, removal from room or place of play, denial of privileges, physical punishment. Types of physical punishment; differences in application to boys, to girls

iii. Socialization

--Encouragement/discouragement of intra-familial socialization; forms
--Encouragement/discouragement of extra-familial socialization; forms; parental attitudes toward child's friends; use of home by child's friends; parental liked and disliked qualities of child's friends
--Encouragement/discouragement regarding socialization outside home; playground, community centers, street, apartment building, etc., trips, events, types, places, frequency
--Parental attitudes toward aggression/withdrawal in reference to selves, child's peers, siblings, adult relatives/adult acquaintances

iv. Leisure time usage

--Presence/absence of parental guidelines for leisure time usage in relation to educational goals or achievement
--Parental approval/disapproval of leisure time usage by child

--specific parental participation/guidance in child's use of his leisure time (trips; theatre; movies; TV; library; reading; hobbies)

--toy inventory; relationship to academic achievement; level of parental awareness of educational toys, play materials; degree to which parent encourages/purchases educational play materials, games, etc.

2. The Home Environment

In order to obtain a systematic and comprehensive survey of other factors in addition to the child care practices operating in the home, a specific instrument was developed. (See Appendix A for a copy of the protocol. The protocol which is in use in the field permits written-in responses.) Twelve major areas of family functioning are covered in the Home Environment interviewing schedule: a) Parents' interest in academic achievement; b) Parents' knowledge of and involvement in the educational progress of the child; c) Parental aspiration for education of the child; d) Parents' occupational goals for the child and their planning to help him achieve these goals; e) Family aspirations and occupational goals; f) Leisure time activities of the family and the child; g) Social models held up to the child; h) Interest in and extent of family acculturation; i) Availability and use of materials and facilities in relation to education; j) Nature of toys, games, hobbies available to child; k) Esteemed values in familial and social interaction; l) Family press for task performance.

The Home Environment interviews completed to date show that the mothers have been able to provide rich, detailed behavioral data; a comparison, by item analysis, of the protocols obtained from the middle class mothers in a corrolary study with the Puerto Rican mothers reveals that there is no significant difference in the extent of detail provided by the two groups in describing the routines of daily behavior.

F. FAMILY BACKGROUND AND CHARACTERISTICS

The senior staff member in charge of sample maintenance and interviewing (Mrs. Olga A. Mendez, M.A.) has maintained continuous contact with the Puerto Rican families since September, 1961. This contact has included periodic visits to the home, frequent telephone conversations with the mothers seeking advice and assistance with special problems. Very early in the project Mrs. Mendez became familiar with the family routines and patterns of household functioning, with the family's marital, housing, financial and other personal problems. It was apparent at the outset that her intimate knowledge of the families would provide invaluable background information against which certain portions of the data would be better understood. Accordingly, detailed factual notes were kept based upon the home visits as they were made and the various special situations as they arose. In order to make this information available in a systematic form, a protocol was developed for describing each family in the sample. The outline for this protocol is as follows:

1. Characteristics of the parents
   - a. Physical description
     - i. General appearance
     - ii. Color and features (in relation to Negro background)
     - iii. Health

   - b. Personality factors

   - c. Personal organization
     - i. Management of income - passive acceptance of their economic status with no faith in or planning for improvements vs realistic acceptance of the status with planning or doing something toward improvement.
     - ii. Physical description of the home
     - iii. How is the home run

2. Relationship between parents
   - a. General tone of the relationship - amicable vs intense disagreement
   - b. Division of labor in terms of authority, discipline, etc.
   - c. Separation - results

3. Social life of the family
   - a. Parents
   - b. Children

4. Cultural Patterns
   - a. Total acceptance of Puerto Rican cultural patterns vs. incorporation of American middle class patterns
   - b. To what extent family deviates from Puerto Rican cultural patterns
     - i. How much father helps in the home
     - ii. Discriminatory expectations for boys and girls

5. Attitudes toward individual children
   - a. Physical attractiveness of each child
   - b. Intelligence
   - c. Obedience
   - d. Would child be taken for Puerto Rican or Negro or inability to decide
   - e. Sickliness vs. sturdiness
   - f. Level of activity outstanding to teacher
   - g. Special perception of child's behavior that affects parents' attitude
   - h. General adaptation of child to school - parent who is getting notes from the teacher vs. child who is achieving and doing well in school. How these situations affect parental attitudes.
   - i. Special talents of the children
   - j. General atmosphere in the home concerning siblings - quarrelsome children with mother intervening in quarrels vs. children getting along well together.

6. Language Usage in Home
    a. Language used dominantly by each parent (Spanish or English)
    b. Language used dominantly by each child (Spanish or English)
        i. When talking with parents
        ii. When talking with siblings
        iii. When talking with peers
    c. Evidence of problems in English usage
        i. In the parents - extent of problem
        ii. In the siblings - extent of problem

The Family Characteristics protocol was pre-tested by the dictation of several of the family descriptions, according to the guidelines indicated above. Analysis of the completed descriptions reveals that comparable data is available in all categories.

Data analysis of the intellectual and perceptual tests have consisted of: scoring the Stanford-Binet, WISC and WAIS protocols by standard procedures; calculating the mean and standard deviations of the IQ scores; utilizing the same method of analysis for the problem solving test (Bead-in-Tube) as was utilized for the middle class sample. The data for the latter will be analyzed under three headings:

1) the ability of the child to construct plans for solutions prior to engaging in the solution attempts
2) determining the relationship between solutions plans and the solution process
3) analyzing the role of perceptual factors in determining the direction of behavior

The scoring for the Audio-Visual Integration test consists of determining the number of errors made by the child, and a comparison of his performance with the standards and scores for his age group.

Data concerning the psychological functioning of the child obtained from the parent interviews and from the three questions asked the siblings will be analyzed qualitatively, by inductive methods, together with information from the school records. From this analysis it is expected that personality characteristics of each child will be defined.

The observations of the behavioral functioning of the Puerto Rican children during the administration of the Stanford-Binet were analyzed according to a conceptual scheme in which each item of the psychometric test was considered as a demand on the child for task performance (stringing beads, block building, copying of a circle, picture identification, etc.). Irrespective of whether a child's answer to an item was correct or not his response could either reflect a decision to engage himself with the task demand (work) or to fail to make such an engagement (not-work). This initial bifurcation could either be expressed through verbalization or through action. If the decision were to work, whether verbally or non-verbally, the response could be delimited and restricted to the defined requirements of the task, or extend beyond these limits in the form of spontaneous associations or other expressions in action or speech. If the initial decision made by the child was not to work this could be expressed either verbally or non-verbally as well, and take the form of negations and expressions of motive, rationalizations of competence, substitutive verbalizations or actions, requests for assistance, or passive non-participation. Clearly the child's initial response could either be continued or altered in response to the reiteration of demand by the examiner. Thus initial work responses could be followed by refusals to work, verbal responses by action, or by any other pattern of consistency or change. The scheme of analysis, therefore, made it possible to classify both initial responses and to engage in a sequential analysis of response chains.

Using this analytical scheme all the behavioral protocols were scored quantitatively which permitted a number of comparisons between the Puerto Rican and middle-class children. The comparisons at the 3 year level were made between 118 of the middle class children and 60 of the Puerto Rican children. Significant differences between the two groups were found and are detailed in the section Results and Findings below.

Data analysis of the child care practices will consist of the itemization of those categories on which the protocols provide comparable data. These general categories include the degree of parental permissiveness, degree of consistency, degree and type of punitiveness, degree of flexibility, etc. A comparative analysis of the family functioning of the Puerto Rican and middle class families will be undertaken where similar data is available.

A similar procedure of data analysis will be applied to the Home Environment interviews when they are completed. Initial analysis indicates that a wide range of qualitative and quantitative ratings and categories will be available. This information will make possible comparative ratings of the Puerto Rican parents in relation to the academic achievement of their children, in all of the areas indicated previously. As a result of the richness and extensiveness of response, comparative ratings will also be available as well in areas pertaining to parental disciplinary practices in relation to school age children, parental interaction with specific school age children (about whom the inquiry was made); and in areas of parental similarities and differences in socialization procedures of their children, both within and outside the home.

IV. RESULTS AND FINDINGS

Analyses of the data already completed suggests a number of findings which have a significant bearing on the objectives of this study. These findings occur in the areas of:

1. Intellectual functioning of the children at different age periods
2. Their academic achievement
3. The cognitive style of the children, especially as it related to task performance orientation versus person-relatedness
4. The level of language functioning

A. INTELLECTUAL FUNCTIONING AT DIFFERENT AGE LEVELS

The I.Q. scores of the pre-school children (the original sample for the longitudinal study of behavioral development) tested at 3 years of age by the Stanford-Binet Form L show a mean of 95.6 with a range of 73 to 128, and a standard deviation of 10.8.

The testing of older siblings, using the WISC for those from the age of six through fourteen and the WAIS for those from fifteen through seventeen was done by three testers, who are designated as folllows:

Tester A, a Puerto Rican psychologist, bilingual in Spanish and English, the senior staff member of the project

Tester B, also a Puerto Rican psychologist, bilingual in Spanish and English, with considerable experience in clinical psychology

Tester C, a non-Puerto Rican psychologist who does not speak Spanish, but who has had considerable clinical experience testing Puerto Rican children fluent in English

The number of tests done by each of the above psychologists and the tabulations related to the tests are:

	No. of tests	Mean	Standard deviation
Tester A	75	97	10.2
Tester B	35	79	12.2
Tester C	9	99	7.9

As can be seen from these tabulations, the two Puerto Rican testers show a considerable difference in their mean test scores (t test, t' = 10.98, significant beyond the .01 level). Tester C, although not Puerto Rican, shows findings which are almost identical with Tester A.

These differences in score results are of great significance from two points of view:

1) the discrepency between the mean and range of I.Q. scores of the two Puerto Rican testers
2) the I.Q. scores achieved by older children tested by Testers A and C do not show any drop in mean I.Q. level when compared with the mean I.Q. level of the younger children.

These two issues were investigated through a number of different analyses of the testing scores and procedures.

The Discrepancy Between the Scores of Puerto Rican Testers

The test protocols of Testers A and B were reviewed in detail by an independent, experienced clinical psychologist who is also bi-lingual in Spanish and English. Her findings are as follows:

a) neither Tester A nor B shows any significant inaccuracies in scoring
b) the test procedures were administered by both testers in the standard manner
c) the protocols of the children tested by Tester A show a significantly greater amount of verbalization. The paucity of verbalization on the protocols done by Tester B is evident in those sub-tests such as Comprehension, where the nature of the test demand not only allows but asks for verbal elaboration. Tester B's protocols further indicate that in general she did not stimulate the children's verbalization, even within the limits permitted by the test instructions.

Other Possible Sources of Difference in Results

Other possible sources of the discrepancy in test results attained by the two testers were explored further:

a) the number of behavior problem cases (as evaluated by a Spanish-speaking psychiatrist in connection with a corrolary study) in the two groups were compared to see whether a differential weighting in either group might account for the discrepancy. The results of this comparison showed: Tester A's group contained 12 behavior problem children; the mean of the I.Q. scores was 91, the standard deviation, 15.5. Tester B's group contained 9 cases of behavior problem children; the mean of the I.Q. scores is 75, the standard deviation 10.3. There is no significant statistical difference between the mean scores of the behavior problem children in the groups tested by the two psychologists.
b) Ordinal position and family size of each of the children in Tester A's and Tester B's groups were compared, with no significant difference appearing between the two groups.

It is also planned to have Tester A re-test a group of randomly selected children from Tester B's group and vice-versa.

Evaluations of the personality characteristics of Testers A and B reveal striking differences. These evaluations have been made by the principal investigator and several other senior professional staff personnel associated with the research team with unanimous concensus not only on the characteristics of the two testers, but also on the marked degree of difference between them. Tester A is highly verbal, outgoing, warm and lively and establishes immediate interpersonal contact with both children and adults. Tester B, while a competent and experienced tester, shows a stiffness and formality in her inter-personal involvement, with relatively little spontaneity and verbalization. In developing their initial rapport with the children, Tester A spent a significant amount of time putting the child at ease, talking to him, showing him around the test area, and answering any questions he might have about his surroundings. Tester B, while concerned with establishing rapport with the child was much more reserved and quiet and did not take any steps beyond those formally required, such as introducing the child to the test area or answering any questions he might have about it.

Our tentative explanation for the difference in test results is that it reflects the difference in the quality of inter-personal relationships and rapport with the children. This interpretation is reinforced by the finding that the I.Q. scores of the children tested by Tester C approximate closely those of the children tested by Tester A. Tester C is similar in personality to Tester A in being lively, outgoing, warm and verbal, with a striking facility for establishing warm inter-personal relationships.

The discrepancy found in the scores of the children tested by Testers A and B suggests that "tester effects", emphasizes in the literature on intelligence testing, may operate on this group of children, revealing, in the test results, the effects of the difference in the rapport and inter-personal relationships established by the testers.

Most of the literature on psychological testing emphasize that the most important factor in the administration of a test that intends to ascertain intellectual functioning is the establishment of rapport, of a "friendly atmosphere" between the examiner and the child. This "rapport" is considered indispensable in order to elicit the maximum cooperation of the child. "The initial approach to the child is of the greatest importance in securing the best test results. How to meet this situation is something the examiner will have to determine in each case for himself," according to Lewis M. Terman and M. Merrill (25). The same authors state, "Great care must be exercised to keep the child motivated. His desire for approval and his natural curiosity are among the most potent aids the examiner has."

After underlining the importance of this factor, the same authors proceed to discuss particulars of the specific test without further clarification or elaboration about how to go about establishing "rapport".

It is well known that some psychologists seem to obtain lower I.Q.'s than others. The children they test talk very little, and often answer questions with "I don't know". Other psychologists, on the other hand, seem to be able to obtain the "best" performance from the child. Both professionals follow the test instructions and comply with its requirements without exceeding them. What makes the difference?

Knowledge that "tester effect" exists and that it may significantly affect the child's test performance is only the first step in the study of this issue. What is required is information on what specific features of the tester's behavior and attitudes can influence what specific groups of children or individual children in what specific test situations. Except for a few investigations, such as those of Katz on the specific reasons for differential effects of Negro and white testers on Negro subjects (26), few such studies exist in the literature.

The findings in the present study on tester effect offer the opportunity to analyze in detail the specific factors in the tester's behavior and attitudes which significantly influence the level of performance of this specific group of children. This analysis is currently in progress.

The I.Q. Level at Different Ages

Our findings with regard to this issue are of special significance because of the prevalent concepts that lower class children typically show a decrement in I.Q. level as they grow older. This is stated by Hess and Shipman, "... children from deprived backgrounds score well below middle-class children on individual and group measures of intelligence (a gap that increases with age)" (27) and by Patricia Sextion in relation to Puerto Rican children in New York City: "... I.Q. scores of East Harlem children decline with age ... By the eighth grade their I.Q. score was 83.2 compared with 103.4 for the city. In the third grade it had been 91.2 compared with 98.8 for the city." (28) Finally, in review of a number of studies Clark and Plotkin state, "The general finding is that Negro and Puerto Rican children generally show deficits not only in school achievement but also in measured intelligence. These deficits in both increase with length of time in school and run parallel." (29).

Our findings regarding the stability of I.Q. levels are as yet non-longitudinal. They are composed of scores of different children at different age levels rather than of the same children at different age levels. However, the comparisons are made of children within the same families. Longitudinal data will be available to this study with the completion of the testing at the six year old level of those same children who were tested at three years of age.

Type of testing	Age of children	N	Mean	S. D.
Stanford-Binet, Form L (Calculation is based on oldest of this group of children). Tester A	3 years	60	95.6	10.8
WISC (Tester A)	6 - 14 years	75	97	10.2
WAIS (Tester C)	15 - 17 years	9	99	7.9

In addition, within Tester A's total sample (N-75) the scores of those children from 6 to 8 years of age were compared with those of children from 12 to 14 years with the following results:

	6 - 8 years old (N-15)	12 - 14 years old (N-9)
Mean	92	94
S. D.	17.7	12.1

The ordinal position and family size of these two sub-samples of children were determined and no significant differences in those variables occur between the two groups.

The above tabulations show clearly that in this population, and employing the tester approach of testers A and C, there is no evidence of any decrement in I. Q. level for the group as a whole as the children's age increases.

The sample of children tested by tester B was evaluated separately because of the estimate, previously indicated, that in the scores achieved by her sample a tester effect was operating and negatively affecting the level of I. Q. scores obtained. A comparison of the mean score and standard deviation of the sub-samples of children 6 to 8 years of age with those 12 to 14 years of age drawn from tester B's sample shows the following:

	Tester B	
	6 - 8 years old	12 - 14 years old
Mean	82	77
S. D.	6.4	14.6

There is a slight age decrement in the I. Q. level of the older age group, but it is too slight to be statistically significant.

B. ACADEMIC ACHIEVEMENT

A tabulation has been made of the scores achieved in the Metropolitan Reading Achievement Test (Comprehension) by 75* of the school-age children in the sample. The remaining 61 children for whom school records had been collected (total N-136) had either not been given this test (see footnote page 11) or their scores had not been recorded by the teachers. However, other tests are available for these children, and equivalency scores in relation to the Metropolitan Reading Test are currently being developed. When completed, the academic achievement of all of the school-age children can be demonstrated.

Table #3 indicates that of the 75 children taking the Metropolitan Reading Achievement Test at some point in their school years, 7 children are above the normal reading level (NRL) for their grade; one child is at grade level; and 67 are below grade level. Published reports (30) indicated norms for each New York City school, in selected grades (2nd, 5th, 7th, and 9th) based upon the median score for that school for tests given May, 1965 (half of the pupils were above the indicated score and half were below). It should be pointed out that the scores for the schools in the disadvantaged areas of the city fell considerably below the norms of the schools in the advantaged areas. The disadvantaged schools were sometimes, two, three, four and even five years behind schools in middle class areas. The scores of the children in the study sample reveal that of the total of 28 children in the four grades for which the school norms were published, 68% also fell below their school norm.

This finding corresponds to the situation defined and described at length in the now voluminous literature dealing with the intellectual retardation of disadvantaged children.

C. COGNITIVE STYLE AS IT RELATES TO TASK-PERFORMANCE ORIENTATION VERSUS PERSON-RELATEDNESS

As indicated previously (page 13), the observational data collected during the administration of the Stanford Binet, Form L, to the three year olds were analyzed according to a conceptual scheme.

Using this analytical scheme all the behavioral protocols were scored quantitatively, thus permitting a number of comparisons between the two groups of children. The comparisons were made between 118 of the middle class children and 60 of the Puerto Rican children. Significant differences between the two groups were found. A detailed

---

*The scores start as Grade 2 "because it is the first point at which reading achievement can be meaningfully measured." (31)

TABLE III

COMPARISON OF NORMAL READING LEVEL WITH CHILD'S READING LEVEL IN RELATION TO AGE AND GRADE (N-75)

Normal Reading Level = NRL	2nd Gr.			3rd Gr.				4th Gr.					5th Gr.		6th Gr.		7th Gr.		8th Gr.	9th Gr.				Total
Chronological Age of Child (Years)	6	7	8	7	8	9	10	8	9	10	11	12	10	11	11	12	12	13	13	13	14	15	16	
ABOVE NRL																								
More than 36 months									1												1			2
31-36 months															1									1
25-30 months													1											1
19-24 months																								
13-18 months					1																			1
7-12 months												1												1
1- 6 months														1										1
AT NORMAL READING LEVEL													1											1
BELOW NRL																								
1- 6 months		3	1		3	1	1		1				1			1								12
7-12 months	1	4	1		2	1		1	2	2			1		1						1		1	18
13-18 months				2	4			1	3	1														11
19-24 months				1		1		1	1	1	1		3		1			1						11
25-30 months							1		1						1		2	2						7
31-36 months																	1	1						2
37-42 months																1					1			2
43-48 months																			1			1		2
More than 48 months below																				1		1		2
TOTALS	1	7	2	3	10	3	2	3	9	4	1	1	7	1	4	2	3	4	1	1	3	2	1	75

report on these findings is currently in press.

The middle class children characteristically responded to demands for cognitive functioning by making a greater proportion of work responses than did the Puerto Rican children. This tendency of the middle class children more readily to engage in task-orientated behavior was expressed both in their initial responses to a demand for cognitive performance and in relation to the ease with which an initial failure to work was converted to a work response on re-presentation of the demand. In contrast, the Puerto Rican children examined were less likely to make an initial work response to a demand for cognitive performance and were less likely to shift from an initial not-work response to a work response upon re-presentation of the demand.

Perhaps the most pervasive difference between the two groups was the tendency of the middle class children to respond very much more frequently to the cognitive demands by verbalization rather than by action or gesture. The increased use of verbalization on the part of the middle class children occurred both when the response made was a work response or when it was a not-work one. This tendency is strikingly reflected in the tendency of the Puerto Rican children to use passive and silent unresponsiveness very frequently.

In addition to differences in the overall amount of verbalization, differences existed in the kinds of verbalizations that were made when the children failed to work. In the middle class group the largest single type of expression through which not-work responses were expressed was an ability-related rationalization. The children would respond to a demand by making such remarks as "I don't know how to do it yet," "I'm too little to do it," or "I haven't learned that yet." In contrast the most frequent of the verbal not-work responses in the Puerto Rican children was irrelevant substitution. Characteristically these children would fail to respond to a demand for cognitive performance by making such statements as "I want my mommy," "I want to play with the toys," "I want to go home," or "I want a drink of water."

The findings were unchanged when differences in I.Q. level and ordinal position were controlled. The Puerto Rican families were not characterized by overcrowding, substandard housing or geographical instability. The families were stable, all the fathers were employed and the children were not deprived of material care. Thus, these Puerto Rican children do not derive from the so-called "culture of poverty" described by Oscar Lewis and explanations based on such a concept do not account for their behavioral style. In addition, the test procedures were not carried out in an unfamiliar language, and the examiner was of a similar ethnic group and well known to the families. In the test situation the children were cooperative and demonstrated their friendliness to the examiner by hugging and kissing her on arrival and departure.

Our hypothesis as to the cause of the difference in functioning of the two groups of children derives from certain impressions gained in the course of our longitudinal studies as to differences in certain specific child care attitudes and practices. It has been our impression that in the middle class families task orientation and task completion in play and in interaction between parent and child were emphasized. The atmosphere in the Puerto Rican families appeared to be one that encouraged social interactions rather than task completion. This difference was reflected not only in relation to the children, but more generally in expressed attitudes and behaviors related to concepts of time and scheduling.

The reactions of the two groups of mothers to the interviewer who was following the behavioral development of the children were strikingly different. Interviews with the middle class mothers were conducted in a businesslike atmosphere. Specific arrangements were made by the parent so that she could be alone with the interviewer. Visitors and interruptions by children were discouraged, or if unavoidable, apologized for. Adherence to a time schedule, often strictly structured, was the rule, and social amenities, when they occurred, always followed the conclusion of business. In the Puerto Rican families the coming of the interviewer was treated as a social occasion, almost always accompanied by offers of coffee or a meal. The interviewer was frequently asked to baby-sit while the mother went out to shop or fetched other children from school. Visitors were welcomed, and encouraged to stay. The interview often required a full day as it was frequently interrupted and only resumed when other social and household obligations were minimally pressing. The attitude was always one of interest and friendliness, but expressed in a style that was clearly distinguishable from the "business is business and pleasure is pleasure" atmosphere characteristic of the middle class homes.

Differences between the two groups with respect to child care practices were also noted. In the middle class group the mothers were very much concerned with the age at which their children could assume responsibility for and exhibit skill in carrying out activities of daily living and self-care. They often expressed values that indicated that in their view the earlier a child was able to feed himself, dress himself, tie his shoes, etc. the better. Precocity in task mastery had high presitge and status value for these families . At points, however, these attitudes of the middle class parents were in conflict with strongly inculcated attitudes towards permissiveness in feeding and toileting that this group of mothers felt were desirable. Consequently, toilet training and weaning from the bottle appeared to be areas in which little pressure for task mastery was exerted. With these two exceptions, however, the atmosphere was one which favored and was organized to produce regular and systematic improvements in skill.

The atmosphere in the Puerto Rican homes was quite different, and was one in which not only weaning and toilet training represented unpressured areas, but where these were merely two among a multitude of circumstances in which pressures for achievement were absent. In addition to expressing a lack of concern with the achievement of skills in the areas of self-care, the Puerto Rican mothers frequently actively discouraged the efforts of their children to feed or to dress themselves. With many children to care for and no household help these mothers had to take their children with them wherever they went shopping or visiting. They accounted for their failure to encourage their children to become proficient in dressing or feeding by saying, "If I do it for him, I get done faster, I have too many things to do."

Although the amount of conversation and verbal exchange was at least as great in the homes of the Puerto Rican children as in the middle class group, the use of language appeared to differ in at least two respects. In contrast to the middle class mothers who verbally described tasks to be done, in the Puerto Rican group there was a greater tendency for verbalization to be social in character rather than task-directed. Further, while the middle class mothers tended to make sure that verbal instructions were understood and carried out, when verbalizations were task-directed, in the Puerto Rican group, there was a tendency on the part of these mothers to exhibit little insistence that the instructions or directions be acted upon.

Patterns of play in general appeared to be different in the two groups. While the middle class parents considered toys to be a source of educational experience, in the Puerto Rican group they were received as amusements rather than as a means of developing achievment skills. So-called educational toys were not often present and play was usually left entirely to the whim of the child. In contrast to the middle class group, where the parents were often actively involved in the children's play, the Puerto Rican parents generally did not introduce the children to a new toy or game and tended to intervene only if the child developed difficulties. Again in contrast to the middle class parents, who encouraged mastery, intervention in the Puerto Rican group was directed towards solving the problem for the child. Little effort was expended in directing the child towards the solution of his difficulties himself.

These characteristics of family atmosphere and parent-child interaction all may contribute to the production of a life style in the Puerto Rican group that fosters the development of the kinds of patterns observed when behavior in response to demands for cognitive functioning is examined. It may be that the Puerto Rican children derive from a person-oriented rather than a problem-oriented culture and lack sufficient opportunity for the exercise of independence in advance of task mastery to permit the development of successful problem-solving behavior under conventional educational conditions. The style of the culture may be one in which verbalizations are used to communicate affective and social contents rather than task-directed ones, with the result that the ability to engage in verbal behavior in the service of solving a cognitive demand fails to develop adequately.

An adequate solution of the worth of these hypotheses in other than impressionistic ways will rest on the completion of the analysis of the detailed data obtained from the home environment interviews of parental practice, the atmosphere in the home with respect to tasks and their mode of execution, evidence on the manner in which the child is introduced to responsibility for self-care, and the values and attitudes of parents towards achievment and mastery by their children. For these reasons we are continuing to collect data on parental attitudes, styles and practices, and it is to be hoped that as a fuller picture of both the life styles and patterns of child care in the Puerto Rican group emerge, certain of these possibilities for which we have strong impressions may be empirically confirmed or rejected. Alternatively others may be able to be advanced to replace those which fail to fit the facts.

D. BILINGUALISM

Two frequently stated concepts in the literature on disadvantaged children are: 1) that lower class children in general come to school deficient in language development, and 2) that Puerto Rican children in New York City have handicaps in the mastery of language skills because of bilingualism. Thus, referring to 1) Hess and Shipman (32) state, ". . . their language development, both written and spoken, is relatively poor;". In relation to Puerto Rican children in New York City, de Hirsch, Jansky and Langford (33) state "Considerable evidence testifies to the fact that a foreign-language background is a handicap when it comes to mastering skills such as reading, writing and spelling that are culturally determined."

The issue here is not whether a child's vocabulary in one specific language may be limited and which can occur for a number of reasons, (34) but whether such a limitation reflects a basic retardation of language development. The issue of the child's retardation in language development can be tested to a significant degree by a comparison of the child's level of functioning on those subtests of the WISC which make the maximum demand for language functioning with those subtests which make the minimum demand for language functioning.

The Comprehension subtest of the WISC which deals with concept comprehension and its verbal communication and the Similarities subtest which deals with the child's ability to abstract and verbalize the abstraction both fall into the category of maximum linguistic demand.

The Picture Arrangement and the Block Design subtests fall into the latter category of minimum language demand.

The protocols of twenty children each, of varying I.Q. levels, were selected from Tester A and Tester B's sub-samples, and the scores on the above four subtests were tabulated. The following tables indicate the results:

Tester A				Tester B			
Com preh.	Simil.	Picture Arrgt.	Block Design	Compreh.	Simil.	Picture Arrgt.	Block Design
12	14	8	12	6	7	8	3
9	12	14	13	9	6	9	8
15	11	11	10	7	10	12	7
10	14	13	14	7	12	7	8
10	12	10	12	6	12	8	9
8	8	11	9	6	12	8	11
10	8	8	10	2	5	6	5
10	14	12	9	5	10	6	8
9	11	7	7	13	11	13	10
11	6	7	5	4	4	5	6
11	8	10	8	8	5	4	7
8	6	5	6	4	9	6	10
5	10	9	12	6	6	14	11
8	9	5	10	5	4	6	6
6	4	7	8	6	8	8	11
6	2	5	9	7	10	8	10
18	19	6	13	5	6	11	8
18	13	15	11	7	10	12	7
17	13	9	9	9	5	8	8
5	10	6	8	5	10	13	9

As can be seen from these tables for each group of 20 children there is no significant difference between their level of functioning on the two verbal tests, Comprehension and Similarities and the two performance tests, Picture Arrangement and Block Design. This preliminary finding suggests that in this group of Puerto Rican working class children that language development as such in relation to performance and over-all intellectuality is not impaired.

This same tabulation will be done for the entire sample, and the findings for the four subtests compared quantitatively

Our study of the issue of bilingualism also includes a comparison of the performance of the children in a Spanish versus English vocabulary test, as well as the relationship of language and vocabulary performance of the child to patterns of language usage in the home. These analyses are in process.

V. CONCLUSIONS

Inasmuch as this is an interim report and many analyses of data are not completed, only a relatively few conclusions can as yet be drawn from the investigations. The following appear to be significant:

1) This population of lower class Puerto Rican children are retarded in school achievement, a finding consistent with that regarding disadvantaged children in general found by other workers.

2) However, the finding, that in these families the children do not show a decrement in I.Q. level between pre-school and school ages, indicates that this retardation in academic achievement is not the result of cognitive defects resulting from presumed deficiencies in the pre-school home environment (cultural deprivation, etc.) For if such cognitive defects had indeed developed, the I.Q. level in the children of school age would be depressed in comparison to the three year old level.

3) Other factors must therefore be responsible for retardation of academic achievement in the group:

- a) poor schooling is a possible source
- b) the teaching approach in the schools may be oriented toward the middle class child who is task-oriented and this approach may not be optimal for learning for the child who is comparatively untrained in task-performance and who is dominantly person-oriented
- c) it is also possible that some factors in the home environment may account to some degree for retardation in academic achievement. Our analyses of the latter is not yet completed.

The findings also seriously question the concept that bilingualism as such will result in retardation in language development. If this were the case, the retardation in reading achievement of the sample cannot be attributed to bilingualism.

Certain conclusions are clearly at variance with prevalent views in the literature dealing with disadvantaged children as indicated in previous sections of the report. A major reason for this discrepancy may be in the sampling procedure utilized by other studies. Heterogeneous rather than homogeneous samples may have been used including children from highly disorganized families, children with brain damage or with prenatal or perinatal problems leading to maladaptive functioning. Another factor possibly affecting the difference in research findings in this and other studies may result from (a) the conditions under which testing is done; and b) the possibility of unidentified tester-effects, such as those identified in the present study, operating to produce differences in test scores.

APPENDIX A

HOME ENVIRONMENT QUESTIONNAIRE - PART I

PUERTO RICAN SIBLING STUDY*

May 22, 1967

(Date of Interview) (Interviewer)

(Name of parent interviewed) (Address)

(Name of subject in interview) (Birth date)

(Name of school) (Current grade in school)

(Subject in Long. Behavioral Development Study)

---

* The protocol in use in the field allows sufficient space between each question for the response to be written in at the time of the interview. For purposes of conserving space for this report, the write-in space has been eliminated.

1. PARENTS' INTEREST IN ACADEMIC ACHIEVEMENT

1. 1. How is______ doing in school this year? (If specific grades are not mentioned, then probe:) Any high grades? Any low grades?

1. 2. How do you feel about______grades? (If dissatisfaction is expressed, then probe:) What grades do you think he should be getting? Does your husband agree?

1. 3. Please tell me in detail what you do when______brings home his report card. (After spontaneous response, then probe if following are not covered:)
If his grades are good ones, what do you do? What do you say?
If his grades are poor, what do you do? What do you say? (Please elicit exact statements by parent to child; also description of specific actions taken by parent).
What does your husband do and say in each case?

1. 4. (If not covered in 1.3:) If______has poor marks, what do you or your husband (or other family members) do to help him get better grades? (Try to determine all possible steps such as: assistance with homework (who helps?); talks with school and/or teacher(s); supervision of homework; etc.

1. 5. What method has worked best in getting your child to improve his grades? Please give some examples.

1. 6. How does______go about doing his homework? (Please elicit concrete step by step description. After spontaneous response, then probe if following is not covered:) Do you have any difficulties in getting him to start his homework? Complete it? Where does he usually do his homework? When? Which member(s) of the family usually help him?

1. 7. Imagine that the teacher sent hom a note saying that______has not been bringing in his homework. What do you do or say? What does your husband do or say?

1. 8. ______is supposed to be doing his homework. Instead, you notice that he is doing something else. What do you do? Say?

II. PARENTS' KNOWLEDGE OF AND INVOLVEMENT IN EDUCATIONAL PROGRESS OF CHILD

II. 1. How does _____ like school? (After spontaneous response, if following is not covered, then probe:) What does he say that makes you feel this way? (Try to elicit recent verbatim statements that indicate the child's positive, negative, or indifferent attitudes toward school).

II. 2. What does he like best about school?
What does he like least about school?
(In each instance probe for three or four concrete descriptions of these likes and/or dislikes)

II. 3. What are _____ feeling about the teachers? (Probe for concrete illustrations and experiences)

II. 4. What are your own feelings about the school he goes to? (After spontaneous response, if following are not mentioned, then probe for feelings about:)
a) the child's experience with the teacher(s)
b) the child's experience with the other children in the school; what kinds of children are there? The friends he makes at school
c) the geographical location of the school
d) the attitude of the school toward parents (probe for concrete illustrations)
e) the quality of teaching (probe here for any special attitudes or experiences the child may have had with language)
f) amount of homework given
g) the physical plant (new, old, but in good repair; worn out and rundown, etc.)

II. 5. Where do you feel _____ can get a better education, here, or in Puerto Rico? What are your reasons?

II. 6. Please describe the last time you talked over a school matter with _____: what was it about? How did it come up? What was said by you (or the fahter)?

II. 7. Please describe the last time you visited the school in relation to some problem regarding _______. (If school was not visited in reference to a problem, but for a positive experience such as a school celebration, performance, etc., elicit concrete details and part taken in same by child). (If problem:) What was the problem about? With whom did you talk? What was said? What was your feeling about this visit to the school? What happened afterward?

II.8 Does ______ have any particular interest or skill in mechanical things? (Elicit concrete examples). Chemical things? Art? Music? Drawing? Singing? (Concrete examples). Other special interests? (In school or out) Sports? (For girl:) Same as above, but add: does she give any evidence of special skill or interest in caring for young children, or other people in general? Cooking?

II.9. Some people think that the school and the teachers in this neighborhood show little interest or feeling for the children. What do you think about this? (Probe for specific examples)

II.10. What programs inside the school are there (aside from regular classrooms) to help a child with his work? (Probe for awareness of remedial programs, study skill classes, etc.) What community programs are there to help a child who is having trouble with his school work? What kinds of programs does the community have?

II.11. Has your child ever had any assistance in school with his school work? What kind? How did he get into the program?

PUBLIC vs. PAROCHIAL SCHOOLS

II.12. (FOR ALL PARENTS:)

We would like you to tell us your feelings about the public and the parochial schools: What are the things you like best about the public school system? What are the things you like least about it? Now, about the parochial schools: what do you like best about them? Least?

II.13A. (FOR PARENTS WHOSE CHILDREN GO TO PUBLIC SCHOOLS:)
Have you considered sending any of the children to the parochial schools? For what reasons? Why didn't you send them there?

II.13B. (FOR PARENTS WHOSE CHILDREN ARE IN PAROCHIAL SCHOOLS:)
Have you considered sending any of the children to public schools? For what reasons? Why haven't you sent them there?

III. PARENTAL ASPIRATION FOR EDUCATION OF THE CHILD

III. 1. Are any of your children in Headstart? (If "yes", probe:) How did you hear about it? (If "no" then probe:) What have you heard about "Headstart"? (Probe for positive and negative things heard, read about, etc.) Have you considered placing your child in Headstart? (If considered it, but did not do so:) What were the reasons your child did not go? Why do you think Headstart was created?

III. 2. (If child has been enrolled in Headstart): In what ways has Headstart helped your child? (Probe for concrete experiences and factors) (If "has helped", then probe:) What changes have you observed in your child since he started the program? What do you think you can do at home to maintain these changes?

III. 3. How far would you like to see ______ go in school? Does your husband agree with you about this? (If "No", then probe for differences between husband and wife) Do you think there should be any differences in the length and type of education given to boys and girls? Please discuss.

III. 4. If you feel ______ may not go as far in school as you would like him to go, how far do you think he will actually go?

III. 5. What are the chances that he will go this far?

HOME ENVIRONMENT QUESTIONNAIRE - Part II

PUERTO RICAN SIBLING STUDY

May 22, 1967

(Date of Interview)	(Interviewer)
(Name of parent interviewed)	(Address)
(Name of subject in interview)	(Birth date)
(Name of school)	(Current grade in school)

(Subject in Long. Behavioral Development Study

IV. PARENTS' OCCUPATIONAL GOALS FOR THE CHILD AND THEIR PREPARATION TO HELP HIM ACHIEVE THESE GOALS

IV. 1. What kind of work would you like _____ to do when he grows up? What does _____ say about this? Your husband?

IV. 2. What are the possibilities that he will do the kind of work you would like him to do? What makes you feel this?

IV. 3. What kind of work would you definitely not want him to do?

IV. 4. How do you feel about children working at such jobs as supermarket delivery, baby sitting, etc.? Does your husband feel the same way? (If "No", probe for differences between husband and wife).

V. 5. Do any of the children (living at home) have jobs now? (If "Yes", list names) Please describe the types of jobs they have, hours worked, etc. (Probe especially for _____ if applicable).

IV. 6. (If "Yes" above): What do they do with the money they earn?

IV. 7. Have you or your husband planned any special steps to help with the children's education? (If "Yes":) Please describe.

V. FAMILY ASPIRATIONS AND OCCUPATIONAL GOALS

V. 1. In what ways are you and your husband better off here than you were in Puerto Rico? In what ways are you worse off here? Have you any plans for returning to the island? What are the reasons why you might like to live there again? What would your reasons be for staying here?

V. 2. Suppose you inherited a lot of money. What would you do with it?

(FOR WOMEN WHO ARE FULL TIME HOMEMAKERS:)

V. 3. How do you feel about mothers having jobs outside their homes? What do you think these women like about working away from home? What do you think they might not like (problems, dissatisfactions, etc.) in working outside their homes?

(FOR THOSE WOMEN WHO ARE NOT WORKING OUTSIDE THEIR HOMES OR GET TEMPORARY SEASONAL JOBS)

V. 4. What are the things you like best about working? What are the things you like least? (Problems, difficulties)

V. 5. If your husband were suddenly to get an increase in pay which would equal amount of money you earn now on your job, what would you do: a) continue working? or b) stay at home? What are all of the things that would affect your decision?

VI. LEISURE TIME ACTIVITIES OF FAMILY AND CHILD

VI. 1. During the last week or so, what are some of the things_____did in his free time? (Allow for spontaneous response, if not much is indicated, then probe for the following possibilities:)
a) played with friends, b) visited relatives, c) read, d) spent time in neighborhood candy store, e) went to playground, playfield or gym, f) went to community center, g) took part in after-school activities in school, h) worked, i) listened to TV, radio or records, k) other________

VI. 2. How do you feel about the way in which_____usually spends his free time? What kinds of things do you like him to? What are some of the things you do not like him to do?

VI. 3. What are some of the things the whole family has done together over the past winter? (Probe for concrete events or activities). What things did the family do together during the Easter week? In the summertime, what are some of the things the family does together?

VI. 4. When your husband is at work and you have some free time, what are some of the things you do with the children?

VII. SOCIAL MODELS HELD UP TO CHILD

VII.1. Who are_____'s best friends? Would you tell me something about them? Has he any friends you do not like? What is it about them you don't like?

VII.2. Are there any adults, outside of your husband and yourself, with whom_____ is particularly friendly? What does he seem to like about them?

VII.3. Among public, well-known persons, who are some whom you admire? What qualities do you admire in them?

VII.4. Who would you like_____to be like? What are the things in this person that you would like to see in_____? (If person mentioned is a relative or a friend, then probe:) What famous person would you like_____to be like?

VIII. INTEREST IN AND EXTENT OF FAMILY ACCULTURATION

VIII.1. What language does the family usually speak at home? (If both English and Spanish are spoken) What is your feeling about this? How do you feel about speaking Spanish in the family? (Allow for spontaneous response, and if following is not covered, then probe:) Why do you feel this way?

VIII.2. Are there any members of the family who do not wish to speak Spanish at home? Which members? (List names). What reasons do they give for this?

VIII.3. Did _____ have any problems with English when he started school? What did you do about it? Have any of the other children had problems with English when they started school? Which ones? (List names). For about how long did this difficulty last? When one of the children has had a problem with English in school, what did you do?

VIII.4. What steps have you taken to learn English? Your husband? (Probe for all steps taken even when father or mother first came from Puerto Rico).

VIII.5. Some people want their children to become more American than Puerto Rican, and some want their children to be more Puerto Rican than American.
(B) What is your feeling about this? How does your husband feel about this question?

VIII.6. What about the children, how do they feel about being more American or more Puerto Rican? (Probe for details; elicit concrete experiences or statements made by family members to illustrate points made by mother). How does _____ feel about this question?

VIII.7. Do you and the other members of the family go to watch the Puerto Rican parade? (If "No":) Why don't you go? Are there any of the children who refuse to go? Which ones? (List names). What reasons do they give for not wanting to go?

VIII.8. Describe any recent discussions (or arguments) that members of the family have had about the question of being "Americanized". (Try to elicit statements made by various members of the family engaged in the discussion) Did _____ participate? What did he say?

IX. AVAILABILITY AND USE OF MATERIALS AND FACILITIES IN RELATION TO EDUCATION

IX. 1. Do you enjoy reading? (If "Yes":) What kind? (Elicit specific types of reading material and names (i.e. newspapers, books, magazines, etc.) What books or magazine articles can you recall having read recently? Tell me something about your husband's reading habits. (Extent of reading: types of reading material, etc.) What are some of the books you have in the house now? Who is reading them?

IX. 2. Who in the family tends to read the newspapers? (List names). Which newspapers do they read? (Probe specifically for wife, husband, older children in the family). Does_____ever read the newspapers? To what extent?

IX. 3. What magazines do the children read? How often? What things in them do they like best? What about_____in relation to magazine reading?

IX. 4. Which members of the family have library cards? (List names). About how often does each of them take books from the library? What about______ in these respects? (card and books from library). If a child takes a book out of the library and forgets to take it back on time, what do you do?

IX. 5. Do you or any other members of the family tend to read to the younger children? (If response is "Yes", then probe:) What are some of the things you can remember reading to the chilldren over the past few months? How old were the children when you (or others) started reading to them?

IX. 6. Do you or any other members of the family tell stories to the younger children? (If "Yes", probe:) How often? Can you recall some of the stories you have told them recently?

IX. 7. Which of the children read before they started to school? (List names). In Spanish? English? Both? How did they learn? (If_____not mentioned, probe specifically for his pre-school reading) Which of the children knew the alphabet before they started school? (List names). How did they learn? (Probe for_____'s knowledge of alphabet prior to school). Which of the children could print or write the letters of the alphabet or numbers before they started to school? (List names). How did they learn? (Probe about_____).

IX. 8. Please describe any occasions over the past school year when any of the children used newspapers, books or magazines for their school work. (Elicit concrete illustrations. If_____not mentioned, probe in relation to above).

IX. 9. Please tell me whether you have any of the following in your home:

(Check appropriate blanks:)	Yes	No	Eng.	Span.
a) Encyclopedia (one volume or mor e)	____	____	____	____
b) Dictionary	____	____	____	____
c) Almanac or fact book	____	____	____	____
d) Book(s) of instruction for mechanical, chemical, electrical projects or for cooking, sewing, knitting, etc.	____	____	____	____
e) Book of English grammar or usage	____	____	____	____

IX.10. We would like to know something about your family's use of TV and radio. What are your own favorite TV programs? Your husband's? The children's? What are your own favorite radio programs? Your husband's? The children's? (If ______ not mentioned, probe specifically for his radio and TV usage and favorite programs). Which members of the family enjoys playing records? (List names). Are they in English or Spanish? What types of records are they? (Probe for ______'s interest in records, if not mentioned.)

IX.11. What is your feeling about Channel 47? How do the other members of the family feel about Channel 47? (If feeling is negative, probe:) What would you prefer to have on Channel 47?

X. NATURE OF TOYS, GAMES, HOBBIES, AVAILABLE TO CHILD

X. 1. Describe some of the games you play with the children when they are babies.

X. 2. Describe some of the games the children play together.

X. 3. Are there any games you play together with the children (after infancy)? Please describe. (Checkers, dominoes, Chinese checkers, cards, etc.) Any games the husband plays with them? (Please describe)

X. 4. Tell me the kinds of toys the younger children (pre-school) children have? (Elicit concrete description. If there are no pre-school children in family, than ask:) What kinds of toys did the children have before they went to school?

X. 5. What kinds of toys do the older children (age 6 - 12) have?

X. 6. What special interests and/or hobbies do the children have? (This should include strong interests in specific toys, such as soldiers, cars, dolls, etc.) or hobbies such as stamp, rock, car collections, etc.

XI. ESTEEMED VALUES IN FAMILIAL AND SOCIAL INERACTION

XI. 1. To what extent do any of the children disagree with you or their father about the way to do things? (Elicit names of children who do) What do you usually do when one of the children disagrees with you? What does their father do when one of the children disagrees with him? Can you recall some recent arguments; what was it about? (Probe for concrete details; what the parents said, what the children said) How was it settled?

XI. 2. Who has final say in granting children permission to go someplace - you or your husband?

XI. 3. What do you usually tell your children when they to go school for the first time ?

XI. 4. Can you recall something in the past week or two that one of the children did that pleased you very much? What was it? What did you say to him about it? What did the child say or do in response? (If can't recall in past week or two, then ask for last month or so, etc.) Can you recall something that one of the children did that displeased you very much? What was it? Please describe what happened. What did you do or say?

XI. 5. Do you think a child should always obey his parents? In what instances should he always obey? In what instances do you "let him get away with it"?

XI. 6. When one of the younger children disobeys, what do you usually do? (Probe for concrete illustration of disobedience and its consequences) What does your husband usually do if one of the younger children disobeys? What happens when one of the older children disobeys? (Probe for both mother's and father's actions).

XII. FAMILY PRESS FOR TASK PERFORMANCE

XII.1. Do you expect the children to help you with the housework ? In what ways? (Probe for details in terms of tasks required; those performed by boys, those by girls; names of children expected to perform them). If ______ is not mentioned, probe for any specific household responsibilities he has) At what age do you feel the children should begin to help you in the house? (Boys and girls)

XII. 2. What applicances in the house do the children operate? (List appliances for each child named)

(insert names of children able to use by themselves)

Vacuum cleaner ________ ________ ________ ________
Stove ________ ________ ________ ________
Iron ________ ________ ________ ________
Radio ________ ________ ________ ________
TV ________ ________ ________ ________
Washing Machine ________ ________ ________ ________
Toaster ________ ________ ________ ________
Record player ________ ________ ________ ________
Other ________ ________ ________ ________
____________ ________ ________ ________ ________
____________ ________ ________ ________ ________
____________ ________ ________ ________ ________

XII.3. What are some of the things do you like the children under five to do for themselves? (After spontaneous response, if following is not covered, then probe:) Dressing themselves; tying their own shoelaces; putting away their playthings? Of the younger children (except the infants): which of them is now able to do these things for himself? (Probe for names for each item) How did they learn?

XII.4. What happens if you have asked one of the children to do something, and the task is left unfinished?

XII.5. Do you expect the older children to help you with the younger children? In what ways? (Probe for tasks expected of which children and at what ages they started to perform these tasks. If______is not mentioned specifically, probe for tasks expected of him.)

XII.6. How about errands out of the apartment house, to the store, etc. At what age did the children start to go outside on errands for you to take the younger children outside to play or to the park, etc.? How about_____ in this respect?

XII.7. What are your feelings about the children travelling in the city. Which ones travel on buses and subways by themselves? At what age did they start? (Probe for_____if not mentioned)

XII.8. Some young children deliver groceries at the supermarkets. How do you feel about this. How does your husband feel about this? Does_____have any job outside the house? Please describe.

APPENDIX B

NEW YORK CLASSROOM BEHAVIOR INVENTORY I*

Student's Name ____ Date ________________

Age _______________ Birthday _______________ Grade _________ School ______

Subject __________________________ Teacher __________________________________

Instructions

Please describe as accurately as possible how the above student behaves in your classroom by circling one of the four responses to each question:

++ (Very Much Like)
+ (Somewhat Like)
- (Very Little Like)
-- (Not At All Like)

Please give a response to every item and base your responses upon your personal observation and experience with the pupil.

---

* CLASSROOM BEHAVIOR INVENTORY, Schaefer, Aaronson, and Burgoon, Laboratory of Psychology, National Institute of Mental Health, May 1965. (By permission of authors)

	Very Much Like	Some what Like	Very Little Like	Not at all Like
1. Remains quietly at work, despite noises and/or other activities around him/her.	++	+	-	--
2. Frequently lets other children boss him/her around.	++	+	-	--
3. Is curious about many things that others hardly notice.	++	+	-	--
4. Works earnestly at his/her classwork; doesn't take it lightly.	++	+	-	--
5. Spends much time comparing his/her work with others.	++	+	-	--
6. Sometimes work is carefully done, other times carelessly.	++	+	-	--
7. Can't wait to learn more about it when something new is being taught.	++	+	-	--
8. Keeps books and papers in order so he/she does not have to spend time looking for them.	++	+	-	--
9. Is mostly satisfied that he/she can do what's expected of him/her.	++	+	-	--
10. Tries to figure things out for himself/herself before he/she asks for help.	++	+	-	--
11. Thinks he/she is doing more poorly than is actually the case.	++	+	-	--
12. Quick to respond when volunteers are called for.	++	+	-	--
13. When he/she gives his/her opinion, the others in the group mostly agree with it.	++	+	-	--
14. Speaks timidly and with self awareness when it is his/her turn.	++	+	-	--
15. Contributes a great deal to class discussions.	++	+	-	--
16. Sticks with a job until it's finished, even if it is difficult for him/her.	++	+	-	--
17. Does the work assigned him/her without being pushed.	++	+	-	--
18. Watches carefully when the teacher or a classmate is showing how to do something.	++	+	-	--
19. Joins a group of his/her own accord (during games, free time, etc.).	++	+	-	--
20. Often bosses his/her classmates around.	++	+	-	--
21. Has a good memory for what he/she has learned.	++	+	-	--
22. Makes an issue over who is to be allowed to go first or to be the first to get something.	++	+	-	--

	Very Much Like	Some what Like	Very Little Like	Not at all Like
23. Comes to class prepared.	++	+	-	--
24. Finds it difficult to approach other children and make friends.	++	+	-	--
25. Is eager to do something nice for the teacher; such as bring flowers, pictures, clippings, etc.	++	+	-	--
26. Relies on others to organize activity for him/her.	++	+	-	--
27. Rarely looks up and around when he/she is at work at his/her desk.	++	+	-	--
28. Does not defend his/her rights against other children.	++	+	-	--
29. Questions why certain things are done in one way rather than another.	++	+	-	--
30. Gets more involved in the studious side of school than in the lighter activities.	++	+	-	--
31. Is quick to defend his/her work and/or to criticize that of others when a comparison is being made.	++	+	-	--
32. Shows strong ups and downs in school work performance.	++	+	-	--
33. Likes to read.	++	+	-	--
34. Proceeds according to some plan or organization when he/she has a job to do.	++	+	-	--
35. Meets new people with assurance.	++	+	-	--
36. Does her/his classwork without asking a lot of unnecessary questions.	++	+	-	--
37. Thinks he/she can't do anything very well.	++	+	-	--
38. Tries to do his/her share of the work.	++	+	-	--
39. Can organize the activities of a group to carry out a definite purpose.	++	+	-	--
40. Shows signs of nervous strain when reciting in class.	++	+	-	--
41. Always has his/her hand raised, if he/she thinks he/she knows the answer.	++	+	-	--
42. Sticks with his/her lessons, trying to get them right even after others would have given up.	++	+	-	--
43. Makes himself/herself agreeable and easy to get along with.	++	+	-	--
44. Listens carefully when a question is asked, so that it doesn't have to be repeated.	++	+	-	--
45. Does not wait for others to approach him/her but seeks others out.	++	+	-	--
46. Will interrupt someone else in order to state his/her opinion.	++	+	-	--

	Very Much Like	Some what Like	Very Little Like	Not at all Like
47. Catches on quickly to new subject matter or ideas	++	+	-	--
48. Considers it important to do well in his/her schoolwork,	++	+	-	--
49. Work is steady and consistent.	++	+	-	--
50. Tends to withdraw and isolate himself/herself even when he/she is supposed to be working with a group.	++	+	-	--
51. Seeks friendly contact with the teacher.	++	+	-	--
52. Asks for help whether or not he/she needs it.	++	+	-	--
53. Centers his/her attention on what he/she is doing and nothing seems to distract her/him.	++	+	-	--
54. Lets others get away with putting him/her in a bad light, or blaming things on him/her.	++	+	-	--
55. Wants to know what makes things work as they do	++	+	-	--
56. Is usually busily occupied with classroom assignments rather than with other activities.	++	+	-	--
57. In classroom discussions tries to show he/she is brighter or more clever than the others.	++	+	-	--
58. Sometimes pays attention; other times must be spoken to constantly.	++	+	-	--
59. Is genuinely interested in academic topics, e.g. mathematics, science, literature, etc.	++	+	-	--
60. Usually works systematically; plans his/her time	++	+	-	--
61. Isn't easily discouraged when people criticize him/her work.	++	+	-	--
62. Can look out for himself/herself; doesn't usually ask for help.	++	+	-	--
63. Expects that others won't think much of him/her.	++	+	-	--
64. Assists the teacher willingly when called upon.	++	+	-	--
65. What he/she does is often imitated by other children.	++	+	-	--
66. Gets awkward or embarrassed when attention is focused on him/her.	++	+	-	--
67. Always knows a story to tell and likes to tell it.	++	+	-	--
68. Goes steadily on with what he/she is doing, even when he/she has difficulty with it.	++	+	-	--
69. As a rule willingly does what she/he is asked to do	++	+	-	--
70. Looks at the person speaking, when a discussion is going on, a story is being told, etc.	++	+	-	--
71. Is seldom without companions.	++	+	-	--
72. Often insists that his/her way of doing something is better.	++	+	-	--

	Very Much Like	Some what Like	Very Little Like	Not at all Like
73. Can solve problems that require logical, well-organized thinking.	++	+	-	--
74. Tries to do better on something than he/she did the last time.	++	+	-	--
75. Can be trusted to return promptly and in good condition an article that has been loaned to him/her.	++	+	-	--
76. Often keeps aloof from the others in class or around the school.	++	+	-	--
77. Likes to talk with or socialize with the teacher before or after class.	++	+	-	--
78. Prefers to ask questions about his/her class work rather than to figure things out for himself/herself	++	+	-	--
79. Becomes so absorbed in his/her work, he/she may not at first hear you call his/her name.	++	+	-	--
80. Doesn't take up for himself/herself if criticized unfairly.	++	+	-	--
81. When learning new facts, wants to understand the reasons why they are so.	++	+	-	--
82. Doesn't join with others when they joke or get silly about their class activities.	++	+	-	--
83. Tries to always be "the one" to do something or to be singled out in some way.	++	+	-	--
84. Often begins a task with enthusiasm, but soon his/her interest declines.	++	+	-	--
85. Likes to discuss what he/she is learning.	++	+	-	--
86. Is organized and orderly in his/her work habits.	++	+	-	--
87. Appears to trust in his/her own abilities.	++	+	-	--
88. Wants to do things himself/herself, without asking a lot of questions or getting aid.	++	+	-	--
89. Is apologetic about what he/she does.	++	+	-	--
90. Tries to get along and work with others.	++	+	-	--
91. Suggests activities or ideas which the group accepts.	++	+	-	--
92. Has difficulty expressing himself/herself orally; can do much better written work.	++	+	-	--
93. Likes to express his/her ideas and views.	++	+	-	--
94. Tries harder when her/his studies get more difficult; doesn't give up easily.	++	+	-	--
95. Begins work at once, as soon as it is assigned.	++	+	-	--

	Very Much Like	Some what Like	Very Little Like	Not at all Like
96. Follows class activity closely, so that he/she can respond to an unexpected question without difficulty.	++	+	-	--
97. Begins a conversation with the person near him/her during free time.	++	+	-	--
98. Tries to be the first to state his/her opinion in a discussion.	++	+	-	--
99. Perceives new applications or new implications of facts or ideas.	++	+	-	--
100. Sets high goals and works toward their attainment.	++	+	-	--
101. Completes his/her work, whether someone checks on him/her or not.	++	+	-	--
102. Seldom talks to other children before or after class.	++	+	-	--
103. Seeks warm personal relations with the teacher.	++	+	-	--
104. Is constantly asking the teacher or him/her classmates for help.	++	+	-	--
105. Gets "lost" in his/her work and seems unaware of things going on around him/her.	++	+	-	--
106. Doesn't complain if he/she gets pushed around.	++	+	-	--
107. Asks thoughtful questions about class work, current events, etc.	++	+	-	--
108. Doesn't like to have his classroom work interrupted.	++	+	-	--
109. Challenges others to show that they can do as well as he/she.	++	+	-	--
110. Sometimes works with good concentration; at other times is restless and easily distracted.	++	+	-	--
111. Seems to like reading or learning about new ideas better than other activities in school.	++	+	-	--
112. Prefers a order, routines, and systematic procedures to a more informal schedule.	++	+	-	--
113. Is not afraid to try new things.	++	+	-	--
114. Prefers work that permits initiative and independent effort.	++	+	-	--
115. Has too low an opinion of his/her own abilities and achievements.	++	+	-	--
116. Is always willing to assist with class plans and activities.	++	+	-	--
117. Capable of winning others to his/her point of view	++	+	-	--

	Very Much Like	Some what Like	Very Little Like	Not at all Like
118. Answers questions in a hesitant, questioning tome.	++	+	-	--
119. Talks freely about self -- what he/she has done, how he/she feels, etc.	++	+	-	--
120. Continues to work on a lesson, to ask questions and get help until he/she is sure he/she understands it.	++	+	-	--
121. Promptly obeys when told to do something.	++	+	-	--
122. Listens attentively in class.	++	+	-	--
123. Takes active part in friendly group dis cussions with others his/her own age.	++	+	-	--
124. Tries to have his/her own way in class or at play without much consideration for others.	++	+	-	--
125. develops more original ideas or solutions than his/her classmates.	++	+	-	--
126. Strives for good grades.	++	+	-	--
127. Feels a responsibility as a member of the class and contributes accordingly.	++	+	-	--
128. Is often alone; does not join informal groups during free time.	++	+	-	--
129. Tries to please the teacher and gain her good will.	++	+	-	--
130. Prefers to be told exactly what to do and to have help getting started.	++	+	-	--

APPENDIX B

NEW YORK CLASSROOM BEHAVIOR INVENTORY II*

Student's Name ______________________________ Date ____________________

Age __________ Birthdate ____________________ Grade __________ School ______

Subject ____________________ Teacher ______________________________

Instructions

Please describe as accurately as possible how the above student behaves in your classroom by circling one of the four responses to each question.

++ (Very Much Like)
+ (Somewhat Like)
- (Very Little Like)
-- (Not at all Like)

Please give a response to every item and base your response upon your personal observation and experience with the pupil.

---

* Adapted from Classroom Behavior Inventory, Schaefer, Aaronson and Burgoon, Laboratory of Psychology, National Institute of Mental Health, May 1965. (By permission of authors.)

	Very Much Like	Some what Like	Very Little Like	Not at all Like
1. Finds it hard to sit still when he/she must listen.	++	+	-	--
2. Helps to straighten up after a lesson; cleans blackboards, etc.	++	+	-	--
3. Makes cruel, spiteful or critical remarks to others.	++	+	-	--
4. Waits his/her turn in line.	++	+	-	--
5. Often holds up his/her hand without having anything of importance to tell.	++	+	-	--
6. Sits and sulks or refuses to take part in class activities when he/she has been reproved.	++	+	-	--
7. Begins discussions with classmates at the same time the teacher is talking.	++	+	-	--
8. Often sits looking around the class during written work.	++	+	-	--
9. Breaks the covers, writes in, or tears the pages of books.	++	+	-	--
10. Does the work assigned him/her without being pushed.	++	+	-	--
11. Always wants to have the last word.	++	+	-	--
12. Often bosses his/her classmates around.	++	+	-	--
13. Often goes to work hastily, without planning first	++	+	-	--
14. Is friendly toward all the children even the less popular.	++	+	-	--
15. Is eager to do something nice for the teacher; such as bring flowers, pictures, clippings, etc.	++	+	-	--
16. Often twists and turns in his/her seat.	++	+	-	--
17. Will jump up to help someone in trouble.	++	+	-	--
18. Taunts children he/she thinks he/she can dominate.	++	+	-	--
19. Tries not to do or say things which would hurt others.	++	+	-	--
20. Does things which are not allowed so that classmates will notice him/her.	++	+	-	--
21. Remains angry a long time after a little quarrel	++	+	-	--
22. Tends to talk much and not listen.	++	+	-	--
23. Is quickly distracted by events in or outside the classroom.	++	+	-	--
24. Damages or mars furniture, equipment, or the building.	++	+	-	--
25. Makes himself/herself agreeable and easy to get along with.	++	+	-	--
26. Often argues that the rules are not fair.	++	+	-	--

	Very Much Like	Some what Like	Very Little Like	Not at all Like
1. Finds it hard to sit still when he/she must listen.	++	+	-	--
2. Helps to straighten up after a lesson; cleans blackboards, etc.	++	+	-	--
3. Makes cruel, spiteful or critical remarks to others.	++	+	-	--
4. Waits his/her turn in line.	++	+	-	--
5. Often holds up his/her hand without having anything of importance to tell.	++	+	-	--
6. Sits and sulks or refuses to take part in class activities when he/she has been reproved.	++	+	-	--
7. Begins discussions with classmates at the same time the teacher is talking.	++	+	-	--
8. Often sits looking around the class during written work.	++	+	-	--
9. Breaks the covers, writes in, or tears the pages of books.	++	+	-	--
10. Does the work assigned him/her without being pushed.	++	+	-	--
11. Always wants to have the last word.	++	+	-	--
12. Often bosses his/her classmates around.	++	+	-	--
13. Often goes to work hastily, without planning first	++	+	-	--
14. Is friendly toward all the children even the less popular.	++	+	-	--
15. Is eager to do something nice for the teacher; such as bring flowers, pictures, clippings, etc.	++	+	-	--
16. Often twists and turns in his/her seat.	++	+	-	--
17. Will jump up to help someone in trouble.	++	+	-	--
18. Taunts children he/she thinks he/she can dominate.	++	+	-	--
19. Tries not to do or say things which would hurt others.	++	+	-	--
20. Does things which are not allowed so that classmates will notice him/her.	++	+	-	--
21. Remains angry a long time after a little quarrel	++	+	-	--
22. Tends to talk much and not listen.	++	+	-	--
23. Is quickly distracted by events in or outside the classroom.	++	+	-	--
24. Damages or mars furniture, equipment, or the building.	++	+	-	--
25. Makes himself/herself agreeable and easy to get along with.	++	+	-	--
26. Often argues that the rules are not fair.	++	+	-	--

	Very Much Like	Some what Like	Very Little Like	Not at all Like
27. Will interrupt someone else in order to state his/her opinion.	++	+	-	--
28. Acts on the spur of the moment without thinking things over.	++	+	-	--
29. Takes up for one whom others pick on.	++	+	-	--
30. Seeks friendly contact with teacher.	++	+	-	--
31. Squirms in his/her seat, taps his/her foot or fingers; is always moving or changing his/her position.	++	+	-	--
32. Tries to help a classmate who is having difficulty	++	+	-	--
33. Laughs at mistakes of others.	++	+	-	--
34. Gives the other an opportunity to express his/her point of view.	++	+	-	--
35. Tries to get the attention of others by asking unnecessary questions, making irrevelant remarks, etc.	++	+	-	--
36. Slow to forgive when offended.	++	+	-	--
37. Even when it is not allowed, takes every opportunity to chat with other pupils.	++	+	-	--
38. His/her attention is quickly diverted from classroom activity.	++	+	-	--
39. Handles the school's possessions roughly and carelessly.	++	+	-	--
40. As a rule, willingly does what he/she is asked to do.	++	+	-	--
41. Almost anything you say, takes the other side.	++	+	-	--
42. Often insists that his/her way of doing something is better.	++	+	-	--
43. Talks first, thinks later.	++	+	-	--
44. Shows sympathy for others.	++	+	-	--
45. Likes to talk with or socialize with the teacher before or after class.	++	+	-	--
46. Leaves his/her seat and moves around much more than other children.	++	+	-	--
47. Assists as much as he/she can when the group is doing something.	++	+	-	--
48. Teases or torments other less fortunate ones than himself/herself.	++	+	-	--
49. Is quick to say "thank you" or show his/her appreciation.	++	+	-	--

	Very Much Like	Some what Like	Very Little Like	Not at all Like
50. Tries to get others to notice him/her by grimaces, body movements, or inappropriate actions.	++	+	-	--
51. Tries to get even with a child with whom he/she is angry.	++	+	-	--
52. Continues talking when it is time to settle down and get to work.	++	+	-	--
53. Has difficulty with going on for a long time with the same kind of work.	++	+	-	--
54. Wastes, damages or destroys schools' supplies and materials.	++	+	-	--
55. Begins work at once, as soon as it is assigned.	++	+	-	--
56. Tries to "out-talk" you to win his/her point, when there is a disagreement.	++	+	-	--
57. Tries to be the first to state his/her opinion in a discussion.	++	+	-	--
58. Shows little restraint, whenever he wishes to speak or act.	++	+	-	--
59. Tries to bring shy or fearful person into the group by asking his/her opinion, choosing him/her in games, etc.	++	+	-	--
60. Seeks warm personal relations with the teacher.	++	+	-	--
61. Frequently shifts position of hands and feet; can't sit still.	++	+	-	--
62. Quick to involve himself/herself in school situations where help is needed.	++	+	-	--
63. Ridicules and mocks others in attempts to out-do them.	++	+	-	--
64. Tries to help others to be comfortable and at ease while with them.	++	+	-	--
65. Laughs, talks or moves noisily to attract the attention of classmates.	++	+	-	--
66. Sulks when not given his/her own way.	++	+	-	--
67. Talks out in class without permission to do so.	++	+	-	--
68. Often cannot answer a question because his/her mind has wandered.	++	+	-	--
69. Handles his/her books, notebooks and other equipment carelessly.	++	+	-	--
70. Promptly obeys when told to do something.	++	+	-	--
71. Often disagrees with what others suggest.	++	+	-	--

	Very Much Like	Some what Like	Very Little Like	Not at all Like
72. Tries to have his/her own way in a class or play without consideration for others.	++	+	-	--
73. Acts quickly, without considering the consequences of his/her action.	++	+	-	--
74. Goes out of his/her way to do thoughful things for others.	++	+	-	--
75. Tries to please the teacher and gain her good will.	++	+	-	--

BIBLIOGRAPHY

1. Frost, Joe L. and Glenn R. Hawkes (eds.), The disadvantaged child: issues and innovations. New York, Houghton Mifflin, 1966.

2. Hellmuth, Jerome (ed.), The disadvantaged child, Vol. 1. Seattle, Washington, Special Child Publications, 1967.

3. Hunnicut, C.W. (ed.), Urban education and cultural deprivation. Syracuse, New York, University Press, 1964.

4. Joan I. Roberts (ed.), Socio-economic status and personality characteristics in school children in the urban slum. New York, Project True, Hunter College of the City University, 1965.

5. Wilkerson, D., Selected readings on the disadvantaged child in Disadvantaged Child, ed. by J. Hellmuth, Special Child Publications, Seattle, 1967.

6. Pavenstedt, E., A comparison of the child rearing environment of upper-lower and very low lower-class families, American journal of orthopsychiatry, 1965, 35:89.

7. Birch, H. The health and education of socially disadvantaged children. Working paper presented at the Conference on Biosocial Factors in the Development and Learning of Disadvantaged Children, Syracuse, New York, April 19-21, 1967.

8. Knobloch, H. and Pasamanick, B. Environmental factors affecting human development before and after birth. Pediatrics, 1960, 26:210.

9. Coles, R. The lives of migrant farmers. American journal of psychiatry, 1965, 122:271.

10. Pasamanick, B. and Knobloch, H. Early language behavior in Negro children and the testing of intelligence". Journal abnormal and social psychology, 1955, 50:401.

11. Katz, I. Some situational determinants of Negro test performance in biracial settings. Paper presented at Annual Meeting of American Orthopsychiatric Association, March, 1955.

12. Redlich, F.C., and Daniel X. Freedman. The theory and practice of psychiatry, 1966, 114-115, New York, Basic Books, Inc.

13. Chess, S., K.B. Clarke, and A. Thomas. The importance of cultural evaluation in psychiatric diagnosis and treatment. Psychiatric quarterly, 1953, 27:1.

14. Test developed in Center for Normal and Aberrant Adaptive Development, Albert Einstein College of Medicine, Yeshiva University. For details see Birch, H.G. and Lilian Belmont. Auditory-Visual Integration in Brain-Damaged and Normal Children, Develop. Med. Child Neurol. 1965, 7, 135-144.

15. Padilla, Elena. Up from Puerto Rico. New York, Columbia University Press, 1958.

16. Glazer, Nathan and Moynihan, Daniel P. Beyond the melting pot: the Negroes, Puerto Ricans, Jews, Italians, and Irish of New York City. Cambridge, the M.I.T. Press and Harvard University Press, 1964.

17. Handlin, Oscar. The newcomers: Negroes and Puerto Ricans in a changing Metropolis. Cambridge, Harvard University Press, 1959.

18. Senior, Clarence. The Puerto Ricans. Chicago, the Quadrangle Press (with cooperation of Anti-Defamation League of B'Nai Brith). 1961.

19. Mills, C. Wright and Senior, Clarence. Puerto Rican Journey. New York, Harper, 1950.

20. Wolf, Richard, Measurements of environment, paper delivered at institutional conference on testing problems. Preliminary manuscript, University of Chicago, 1964.

21. Bernstein, Basil. Language and social class. British journal of sociology, II: 271.

22. Sears, Robert, Eleanor Maccoby and Harry Levin. Patterns of child learning. Evanston, Illinois. Aero and Peterson and Co., 1957.

23. Ferman, Louis A., Joyce, L. Kornbluh and Alan Haber, eds. Poverty in America: a book of readings. Ann Arbor, University of Michigan Press, 1965.

24. Shipman, V., Robert Hess and Jere Brophy. Effects of social class and level of aspiration on performance in a structured mother-child interaction situation. Presented at a meeting of Society for Child Development, Minneapolis, March 25, 1965. Unpublished manuscript.

25. Terman, L.M., and M. A. Merrill. Measuring intelligence, Houghton Mifflin Company, 1937, p. 69.

26. Katz, I., op.cit.

27. Hess, R. D., and Shipman, V. C. Early experience and the socialization of cognitive modes in children. Chicago, Illinois. Child Development. 1965, 36, 869-886.

28. Senton, Patricia C. Spanish Harlem: anatomy of poverty. New York. Harper & Row, 1965. 55.

29. Clark, Kenneth B., and Plotkin, Lawrence. Social Dynamics Research Institute. City College of New York, City College. Personal Communication.

30. New York Times, Dec. 23, 1966, p. 30.

31. Ibid.

32. op. cit. 36

33. de Hirsch, Kabrina, Jeanette Jansky, William S. Langford, p. 7, New York Harper and Row, 1966.

34. Landreth, Catherine, Early childhood: behavior and learning 1945. New York, Alfred Knapf, 1967.